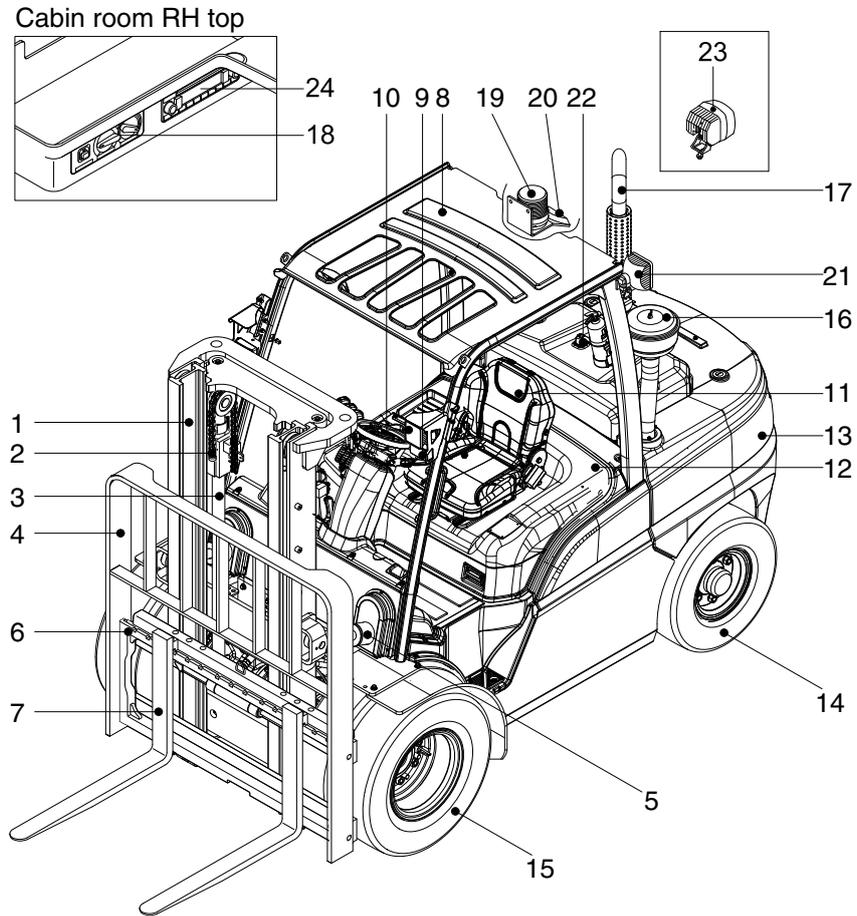


3. KNOW YOUR TRUCK

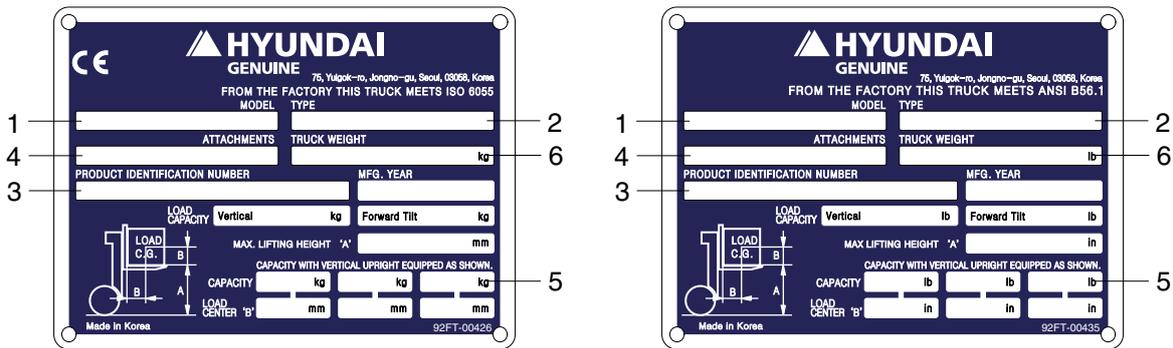
1. GENERAL LOCATIONS



35D9VB3KY01

- | | | |
|------------------|--------------------|--------------------------------|
| 1 Mast | 9 Turn signal lamp | 17 Silencer |
| 2 Lift chain | 10 Head lamp | 18 Aircon & heater (opt) |
| 3 Lift cylinder | 11 Operator's seat | 19 Beacon lamp (opt) |
| 4 Backrest | 12 Bonnet | 20 Camera (opt) |
| 5 Tilt cylinder | 13 Counterweight | 21 Rear work lamp (opt) |
| 6 Lift bracket | 14 Rear wheel | 22 Rear handle with horn (opt) |
| 7 Forks | 15 Front wheel | 23 Blue spot (opt) |
| 8 Overhead guard | 16 Precleaner | 24 Radio & USB player (opt) |

2. NAME PLATE



1) TRUCK MODEL NUMBER OR REGISTERED NAME

2) TRUCK TYPE

The type is indicated a type of the truck such as diesel, LPG or battery.

3) TRUCK SERIAL NUMBER

An identification number assigned to this particular truck and should be used when requesting information or ordering service parts for this truck from your authorized HYUNDAI dealer. The serial number is also stamped on the frame.

4) ATTACHMENT DESCRIPTION (IF ANY INSTALLED)

The user must see that the truck is marked to identify the attachment (s), including the weight of the truck/attachment combination and truck capacity with the attachment.

5) CAPACITY RATING, LOAD CENTER, AND LIFTING HEIGHT DATA

Shows the maximum load capacity of this truck with relation to load centers and fork heights (See diagram on plate). Personal injury and damage to the truck can occur if these capacities are exceeded.

Do not exceed the maximum capacity specified.

6) TRUCK WEIGHT

The approximate weight of the truck without a load on the forks. This weight plus the weight of the load must be considered when operating on elevators, elevated floors, etc. to be sure they are safe.

▲ Before modifications that affect the stability of safety systems are made written approval from HYUNDAI. This is an OSHA requirement. Contact your authorized HYUNDAI dealer for a new nameplate showing the revised capacity.

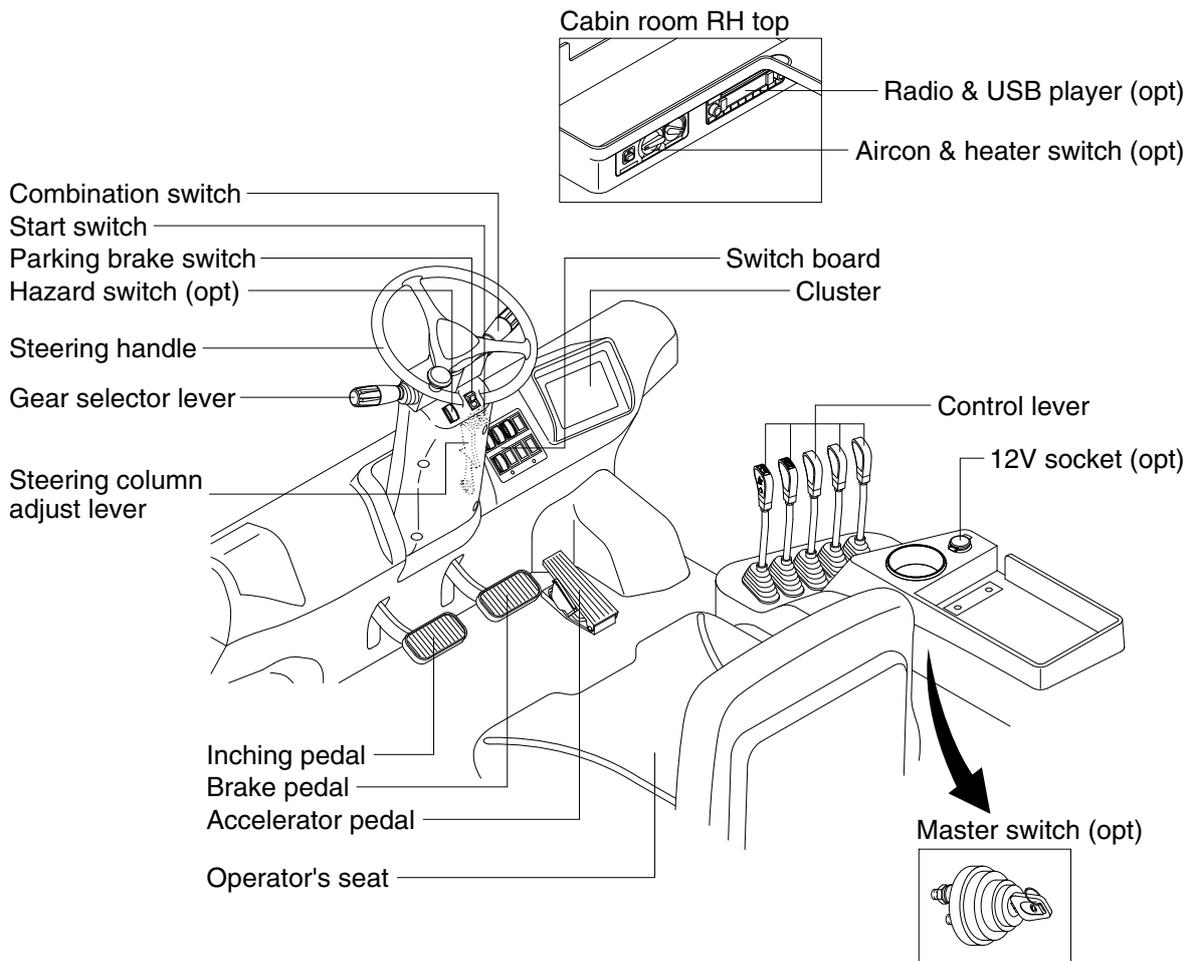
3. CAB DEVICES

1) The ergonomically designed console box and suspension type seat provide the operator with comfort.

2) ELECTRONIC MONITOR SYSTEM

(1) The centralized electronic monitor system allows the status and conditions of the truck to be monitored at a glance.

(2) It is equipped with a safety warning system for early detection of truck malfunction.



35D9VB3KY02

4. CLUSTER

1) STRUCTURE

Like following figure, cluster is consisted of LCD and buttons. LCD will indicate the operation and abnormal status of truck to the driver in order to use and maintenance. Also, LCD allows to set and indicate the various modes, monitoring, and gadgets.

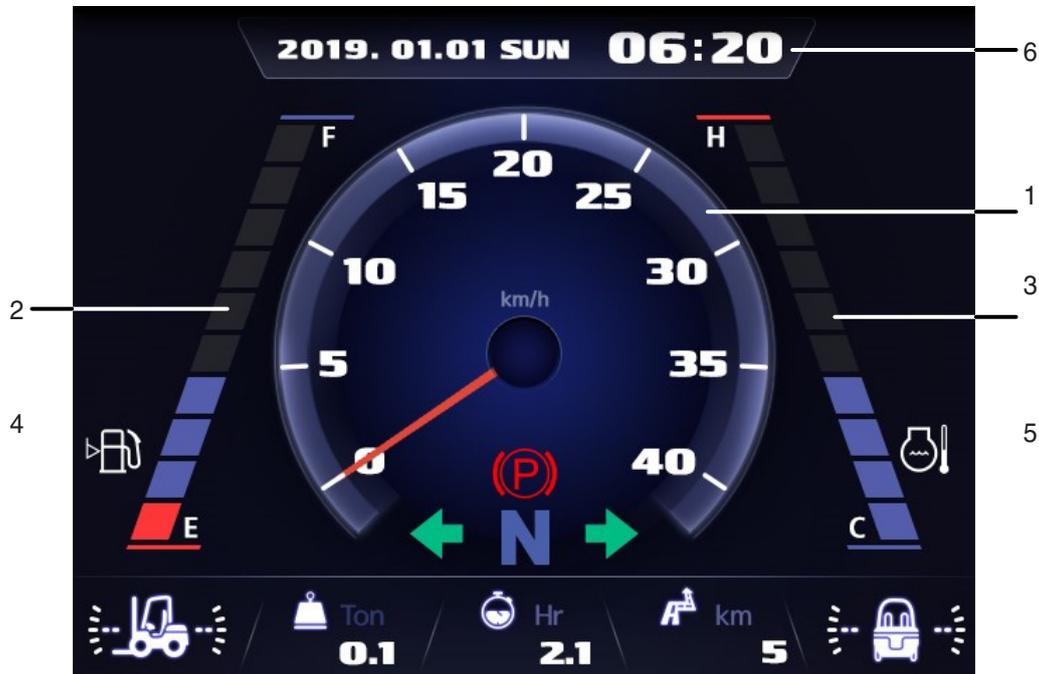
- ※ The cluster installed on this truck does not entirely guarantee the condition of the truck. Daily inspection should be performed according to chapter 7. **PLANNED MAINTERNACNE AND LUBRICATION.**
- ※ When the cluster provides a warning immediately check the problem, and perform the required action.



2) GAUGE

(1) Operation screen

Operating screen will be displayed if turn on the start switch.



35D9VB3KY04

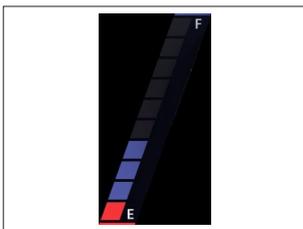
- | | | | |
|---|-------------|---|---------------------------|
| 1 | Speed meter | 3 | Coolant temperature gauge |
| 2 | Fuel gauge | 4 | Clock |

(2) Speed meter

It indicates the speed of truck and calibrated in miles per hour (mph) or kilometer per hour (km/h).

※ Speed unit can be set in the speed unit menu of display set up at page 3-32.

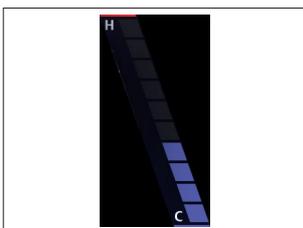
(3) Fuel gauge



35D9VB3KY05

- Fuel gauge displays the approximate amount of fuel remaining in the fuel tank.
- It shall be obtained fuel as soon as warning lamp  lights on.

(4) Coolant temperature gauge



35D9VB3KY06

- It indicates the temperature of the engine coolant.
 - White zone : 40 ~ 120 °C (104 ~ 248 °F)
 - Red zone : Over 120 °C (248 °F)
 - Warning lamp on : Over 115 °C (239 °F)
- If the gauge display in the red zone, or warning lamp  comes on, please stop the engine and inspect the coolant system.

(5) Clock



35D9VB3KY07

- It displays current time.
- The time can be adjusted at display Set Up > Time Set Up menu.

3) WARNING LAMPS

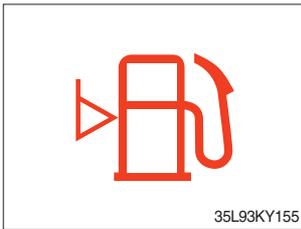


35D9VB3KY08

No.	Warning lamp		No.	Warning lamp	
1		Fuel Level warning lamp	9		Transmission oil temperature warning lamp
2		Coolant temperature warning lamp	10		DPF regeneration warning lamp
3		Engine oil pressure warning lamp	11		DPF inhibit warning lamp
4		Air cleaner warning lamp	12		DPF high temperature warning lamp
5		Water in fuel warning lamp	13		Clutch protection warning lamp
6		Engine check warning lamp	14		Communication error warning lamp
7		Engine stop warning lamp	15		Fingertip warning lamp
8		Battery charge warning lamp	-	-	-

※ Warning and indicator lamp will display only items that were set as ON, and all warning and indicator except fuel level warning and coolant temperature warning will be displayed in order from the left of screen. And directional indicator lamp will display at the center.

(1) Fuel level warning lamp



- Warning lamp will be displayed if fuel level is low.
- Please refuel immediately if the lamp is ON.

(2) Coolant temperature warning lamp



- Coolant temperature warning will be lit up when temperature is over 115 °C (239 °F).
- If the warning lamp is on continuously, please inspect the coolant system.

(3) Engine oil pressure warning lamp



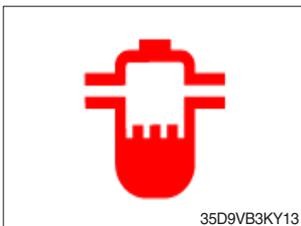
- This warning lamp will be lit up when engine oil pressure is low.
- Stop the engine immediately if the warning lamp is lit up. Please check the engine oil.

(4) Air cleaner warning lamp



- This warning lamp is lit when air cleaner filter is clogged up.
- Please clean up or replace the filter.

(5) Water in fuel warning lamp



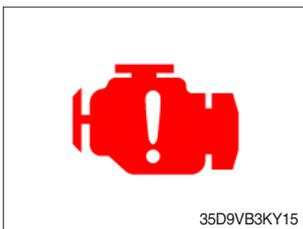
- Light up when water in fuel.
- Stop the engine and please drain the water of the fuel filter.

(6) Engine check warning lamp



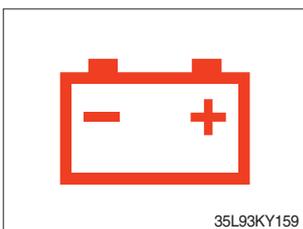
- When the engine is ON, it blinks for about 3 seconds. If the warning light remains on after 3 seconds, there is something wrong with the engine control, fuel supply and so on.
- Check the failure code of cluster.
- ※ **Some engine controls may not start if there is a problem.**
- ※ **Continued operation with the engine warning lamp ON or flashing can damage the exhaust control system, which affects operating performance and fuel consumption. You may also be subject to sanctions related to emission regulations, so be sure to check.**

(7) Engine stop warning lamp



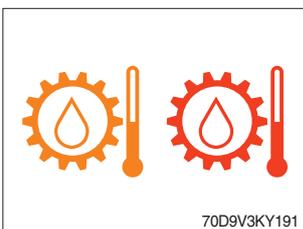
- If the lamp lights on, stop the engine immediately and check the engine.
- ※ **Please contact your Hyundai service center or local dealer.**

(8) Battery charge warning lamp



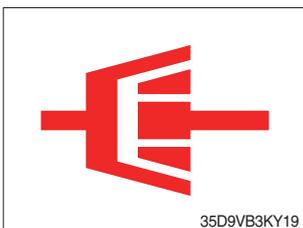
- This warning lamp is lit when battery charging voltage is low.
- Please inspect the battery charging circuit if the warning lamp is lit.

(9) Transmission oil temperature warning lamp



- Transmission oil temperature warning is consisted of two indications.
 - 110 °C (230 °F) or higher : Amber is light up
 - 120 °C (248 °F) or higher : Red is flashing
- When this lamp light up during operation, stop the engine and check the truck.

(10) Clutch protection warning lamp



- Warning lamp will be displayed if transmission oil pressure is not enough or while inching operation.
- Please check the transmission when the lamp is displayed without inching operation. If not, the brake performance can be decreased until the problem is resolved.

(11) Communication error warning lamp



- This warning lamp will be lit up if the communication between cluster-CI and ECU is fail.
- Please check the communication line if the warning lamp is lit up.

(12) DPF

- ※ During auto regeneration, it is possible to operate the truck (driving and handling the load).
- ※ Sufficient automatic regeneration could reduce the frequency of parked regeneration.

① Inhibit regeneration switch : OFF

Level	Warning lamp				Stage of regeneration
	DPF inhibit	DPF regeneration	DPF high temp	Engine check	
Level 0 (No need regeneration)			*On		Regeneration is not required.
Level 1 (Auto regeneration)			*On		Regeneration starts automatically when the PM (particulate matter) level reaches to this level.
Level 2 (Request parked regeneration)		On	*On		ECU requests parked regeneration. Operator needs to follow parked regeneration method. Automatic regeneration does not stop in this level.
Level 3 (Parked regeneration)		On	*On	On	Automatic regeneration stops. Operator had better park the machine and start parked regeneration as soon as possible. During parked regeneration, machine operation is restricted. Engine output will be limited from Level 3.
Level 4 (Regeneration with service tools)		Blink	Blink	Blink	Parked regeneration is impossible. Regeneration is possible with service tools only.

* : When regenerating

② Inhibit regeneration switch : ON

Level	Warning lamp				Stage of regeneration
	DPF inhibit	DPF regeneration	DPF high temp	Engine check	
					
Level 0 (No need regeneration)	On				Regeneration is not required.
Level 1 (Auto regeneration)	On				Automatic regeneration inhibit.
Level 2 (Request parked regeneration)	On	Blink			ECU requests parked regeneration. Operator needs to follow parked regeneration method. (Automatic regeneration inhibit)
Level 3 (Parked regeneration)	On	Blink		On	Operator had better park the machine and start parked regeneration as soon as possible. During parked regeneration, machine operation is restricted. Engine output will be limited from Level 3.
Level 4 (Regeneration with service tools)	On	Blink		Blink	Parked regeneration is impossible. Regeneration is possible with service tools only.

- ※ The hydraulic operation noise will be generated during automatic regeneration. During auto regeneration, it is possible to operate the truck (driving and handling the load), and hydraulic operation sound may change depending on the user operation.
- ※ Sufficient automatic regeneration could reduce the frequency of parked regeneration.

(13) Fingertip warning lamp



- If this warning light is lighted, check the finger tips.
- If the warning lights are lit while driving, stop the engine and check the forklift.

4) INDICATOR LAMPS



35D9VB3KY24

No.	Indicator lamp	No.	Indicator lamp
1	 Engine warning up indicator lamp	6	 OPSS indicator lamp
2	 Fuel warmer indicator lamp	7	 N
3	 Consumable replacement indicator lamp	8	 F ₁ F ₂
4	 Parking brake indicator lamp	9	 R ₁ R ₂
5	 TILT LOCK	10	

※ Warning and indicator lamps will display only items that were set as ON, and all warning and indicator except turning indicator lamp and driving indicator lamp will be displayed in order from the left of screen.

(1) Engine warm-up indicator lamp



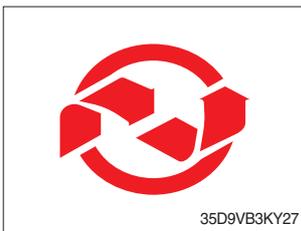
- The truck senses the engine coolant temperature and warms-up engine when needed.
- When it is happening, the indicator lamp is ON.

(2) Fuel warmer indicator lamp



- Light up when fuel warmer is operating. (Controlled by ECU)

(3) Consumable replacement indicator lamp



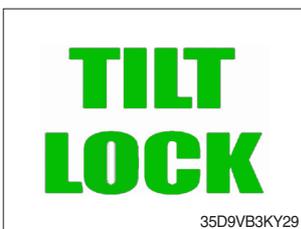
- Light up if consumables which must be replaced are exist.
- The indicator lamp will light up only 3 minutes since start switch ON, and then light OFF.
- Please check the consumables management list in maintenance menu.

(4) Parking brake indicator lamp



- Light up when parking brake is ON.

(5) Tilt lock indicator lamp



- The Indicator lamp will be lit up if the tilt lock switch (option) is entered.
- Tilt action will be limited if this Indicator lamp is lit up and the mast is located at 90 degrees.

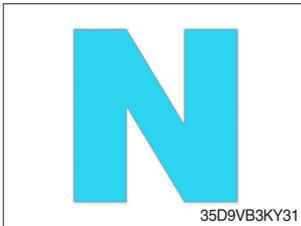
(6) OPSS indicator lamp



- Light up if driver leave seat during operation.
- Truck driving and/or mast control will be blocked if lamp is lit up.
- ※ Please refer to page 0-11,12 for details.

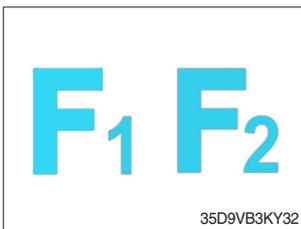
(7) Driving indicator lamp

① Neutral



- This indicator lamp will be lit up when direction lever is located in neutral.

② Forward



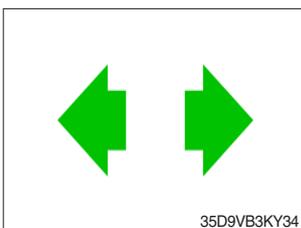
- This indicator lamp is displayed if the forward gear is selected.

③ Reverse



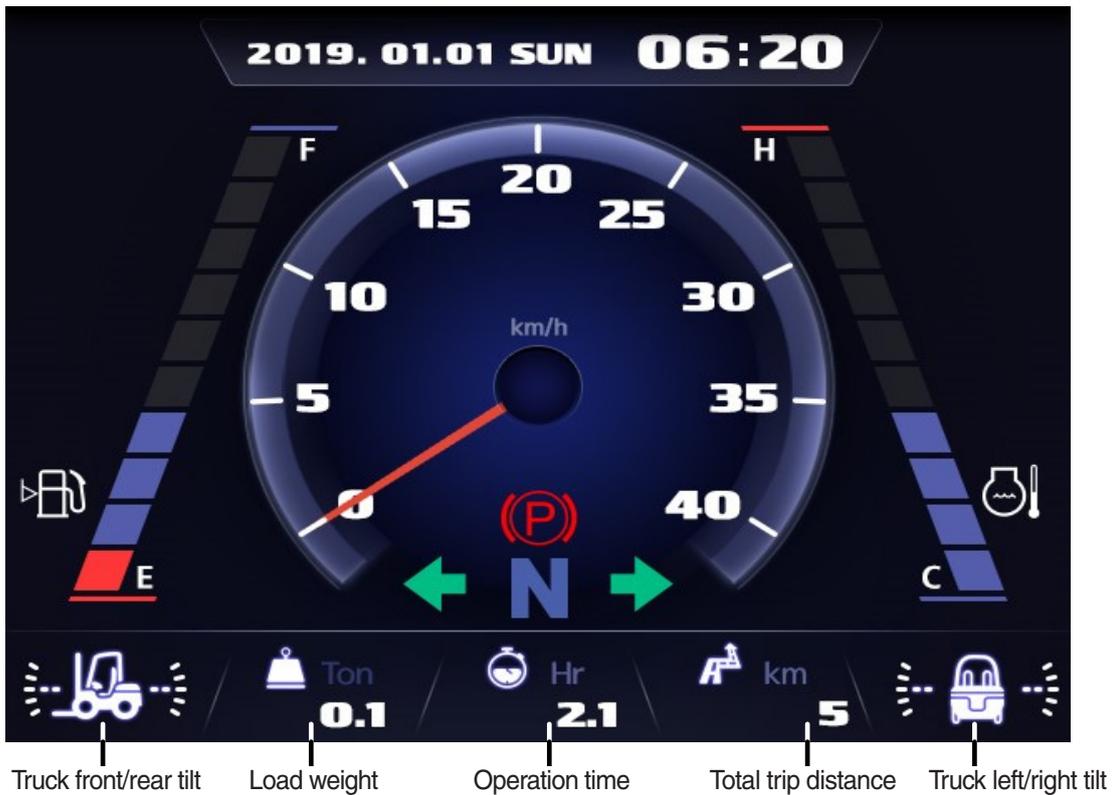
- This indicator lamp is displayed if the reverse gear is selected.

④ Right or left turning indicator lamp



- This indicator lamp will flash if turns on the right or left turn signal.

5) INFORMATION DISPLAY



35D9VB3KY35

(1) Mast front/rear tilt



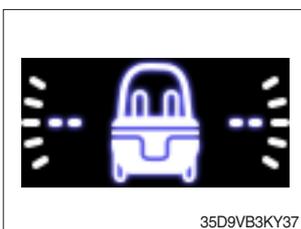
- Display the real time tilt of mast.

(2) Truck front/rear tilt



- Display the front/rear tilt of truck in real time.
- The red warning symbol turned on condition.
 - Stop : Tilt angle is higher than 2.3°
 - Driving : Tilt angle is higher than 10.2°

(3) Truck left/right tilt



- Display the front/rear tilt of truck in real time.
- The red warning symbol turned on condition.
 - Stop : Tilt angle is higher than 3.4°
 - Driving : Tilt angle is higher than 28.0°

(4) Load weight (option)



- Display the load weight.
- Screen will display blurry if the weight sensor has not been mounted.

(5) Total trip distance



- Display total trip distance of the truck.
- Unit of distance is kilometer.

(6) Operation time



- Display the used time of the truck.

(7) Explanation of warning lamp and indicator lamp

- When warning lamp or indicator lamp comes on, please press the enter button to check detailed explanation.
- During pressing the enter button, it keeps the screen to be shown explanation for warning lamp or indicator.

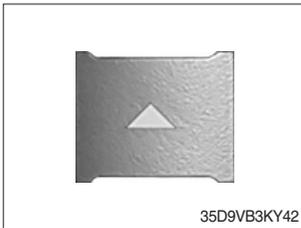
6) BUTTONS

(1) Camera



- This switch displays rear camera images. (if the camera is mounted)

(2) UP/Left



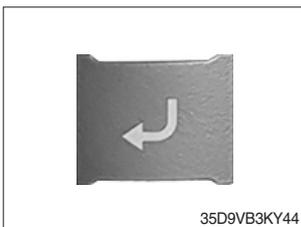
- This switch is used to move upward or leftward in menu or increase the value.

(3) Down/Right



- This switch is used to move downward or rightward in menu or decrease the value.

(4) Select



- This switch is used to enter into the menu or to select.

(5) Cancel (ESC)



- This switch is used to cancel or move to upper menu.

7) MAIN MENU

(1) Structure

A menu consists of main menu and sub-menu.

Operation Screen



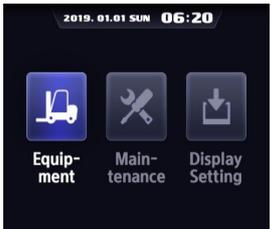
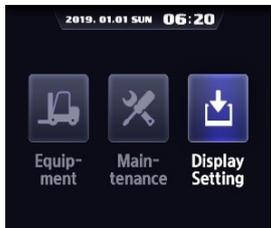
Main Menu Screen



Sub-Menu Screen



35D9VB3KY46

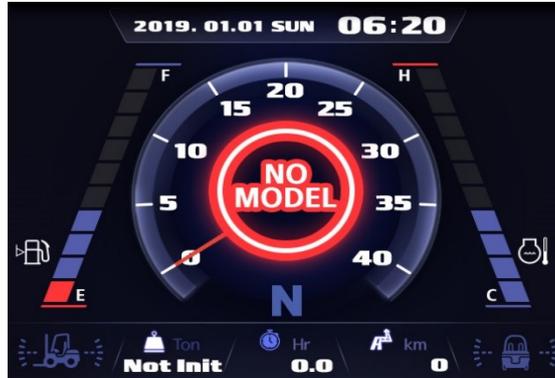
No.	Main menu	Sub menu	Explanation
1	 <p>35D9VB3KY47</p>	<ul style="list-style-type: none"> · Model select · Tilt setting · Weight sensor setting · ESL setting · Camera setting · Auto-shift speed setting · DCSR setting · Limit warning speed setting · MCU/Cluster information 	<ul style="list-style-type: none"> · Diesel, LPG · Vehicle tilt Initialize · Enter the cylinder cross section area , Adjust load weight, Weight display setup · ESL setting, Delay time · Interoperate with reverse gear · 1st gear-> Switching speed to 2nd gear, 2nd gear -> Switching speed to 1st gear · DCSR On, Block driving speed, Restore driving speed · Maximum speed limitation · MCU/Cluster Information
2	 <p>35D9VB3KY48</p>	<ul style="list-style-type: none"> · Failure History · Maintenance · Management · Signal status · User password change 	<ul style="list-style-type: none"> · Current engine failure, Engine failure history · Change oil and filter replacement cycle · Analog Input, Digital input/output
3	 <p>35D9VB3KY49</p>	<ul style="list-style-type: none"> · Adjust LCD Brightness · Time Setting · Unit Setting · Language Setting · A/S phone No. · ESL password change · Maintenance management 	<ul style="list-style-type: none"> · Automatic, Manual · Clock · Speed, Weight, Temperature, Pressure, Date type · Korean, English · Change A/S contact · E/G starting password connect · Maintenance parts management

(2) Equipment menu

① Model select (Required setting)

- How to check the Model Select (Check under the start switch ON status)
- Selection will be canceled if press the cancel button.

※ This is a required setting. Some functions may not be worked properly if you do not select the model.



35D9VB3KY50

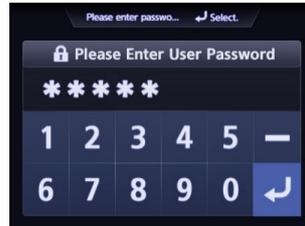
1. Equipment



35D9VB3KY47

Enter to equipment menu.

2. Password



35D9VB3KY51

Enter the password.
Default password is "00000".
Password length must be 5~10 digits.

3. Model select



35D9VB3KY52

Choose model select

4. Diesel or LPG



35D9VB3KY53

Please select the fuel type.

5. Truck weight



35D9VB3KY54

Please select the vehicle weight level.

6. Truck model



35D9VB3KY55

Please select the exact model name.

7. Confirm



35D9VB3KY56

Model selection is completed.

8. Completion



35D9VB3KY57

9. Check



35D9VB3KY58

Check the phrases would be disappeared in the main screen.

- ※ If you want to move back to previous page, please enter ESC button in any stage.
- ※ It shall be selected right model to prevent malfunction of vehicle.

② Initialize truck tilt (as required setting)

How to check "the initialize truck tilt" (Check under the start switch ON status.)

- ※ The tilt sensor has already been initialized when deliver the vehicle from factory.
- ※ Initialize vehicle tilt if the tilt sensor figure or vehicle tilt is not horizontal in the flatland.
- ▲ You must set tilt in the flatland since this is a horizontal set up.

Vehicle that has not applied the mast angle sensor

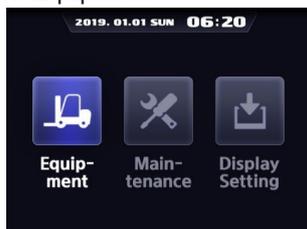


Vehicle that has applied the mast angle sensor



35D9VB3KY59

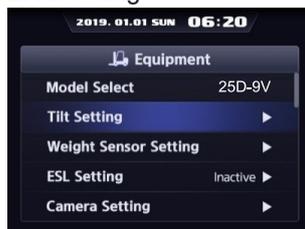
1. Equipment



35D9VB3KY47

Enter to equipment menu.

2. Tilt setting



35D9VB3KY60

Please select the exact model name.

3. Instruction



35D9VB3KY61

Follow the instruction showing in the screen.

4. Completion



35D9VB3KY62

- ※ If tilt sensor for mast is mounted (option), locates the mast vertically.
- ※ Mast maximum angle depends on the vehicle.

a. Check functions

(a) Check the real time operation by changing angles of vehicle tilt and mast tilt.

(b) Auto-leveling (option)

- ① Tilt mast forward or backward.
- ② Start tilting mast toward its vertical position, pushing the auto tilt leveling switch.
- ③ Check if the mast stops traveling when it becomes vertical to ground.

(c) Forward or backward tilt warning (red)

- Stop : $\pm 2.3^\circ$ (1.5 tons ~ 5.0 tons)
- Driving : $\pm 10.2^\circ$ (1.5 tons ~ 5.0 tons)

(d) Left/Right Tilt Warning (red)

- Stop : $\pm 3.4^\circ$ (1.5 tons~5.0 tons)
- Driving

Vehicle Weight	Warning Angles (Red)
1.5 tons ~ 2.0 tons	$\pm 20.3^\circ$
2.2 tons ~ 3.3 tons	$\pm 20.8^\circ$
3.5 tons ~ 4.5 tons	$\pm 24.2^\circ$
5.0 tons	$\pm 28.0^\circ$

③ Weight sensor set up

- How to check "the weight sensor set up" (Check under the start switch ON status)
- There are three settings for weight sensor. (unload, lad, initialization)

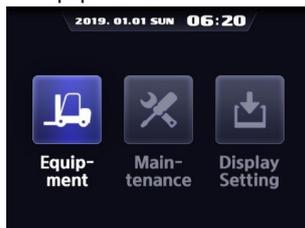
※ The weight sensor has already been set when deliver the vehicle from factory.

a. Setting cylinder cross section

Vehicle that has not applied the weight sensor

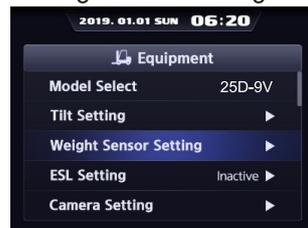


1. Equipment



Enter to equipment menu.

3. Weight sensor setting



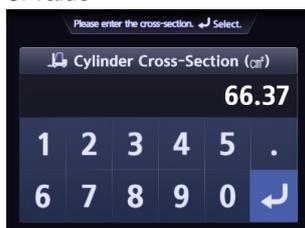
Choose weight sensor setting and enter.

4. Cylinder cross-section



Choose Cylinder Cross-Section. If Cylinder Cross-Section is already set up, setting value is shown in initial screen.

5. Value



Enter cylinder cross-section value using up/down buttons.

6. Completion



Setting has been completed.

7. Check



Check the value whether it is right.

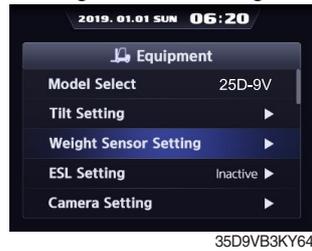
b. Unloaded status adjustment

1. Equipment



Enter to equipment menu.

3. Weight sensor setting



Choose weight sensor setting and enter.

4. Load weight adjust



Choose load weight adjust and enter.

5. Unloaded status adjustment



Choose unloaded status adjustment and enter.

6. Instruction



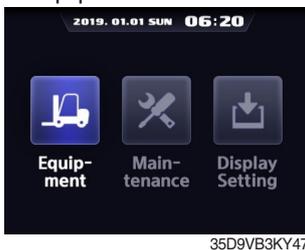
Follow the instruction showing in the screen. After finish setting and press enter button

7. Completion



c. Loaded status adjustment

1. Equipment



Enter to equipment menu.

3. Weight sensor setting



Choose weight sensor setting and enter.

4. Loaded status adjustment



Choose loaded status adjustment and enter.

5. Value



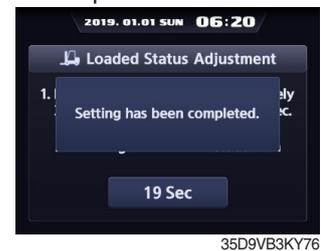
Enter load weight using up/down buttons.

6. Instruction



Follow the instruction showing in the screen. After finish setting and press enter button. Please proceed the operation within 30 seconds.

6. Completion



- ※ Must be prepared to lift up by locating the load on the fork before enter the weight.
- ※ Must be performed within 30 seconds of lift task. If it is not completed within 30 seconds, this process will be canceled automatically.
- ※ Accurate weight value is not recognized if other pressure changes that are occurred besides salvage work.
- ※ Re-perform the "Load/No-Load Adjustment", if the measurement malfunction is occurred.

d. Initialization

Initialize the all values of "No-Load Adjustment" and "Local Adjustment" that were entered previously. (Cylinder cross-sectional area is not initialized.)

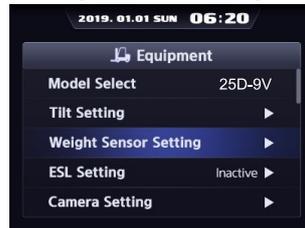
1. Equipment



35D9VB3KY47

Enter to equipment menu.

3. Weight sensor setting



35D9VB3KY64

Choose weight sensor setting and enter.

4. Initialization



35D9VB3KY77

Enter to initialization.

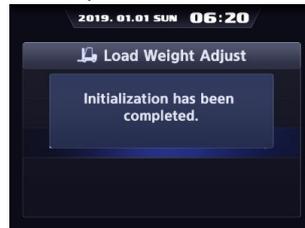
5. Check



35D9VB3KY78

Press the enter button.

7. Completion



35D9VB3KY79

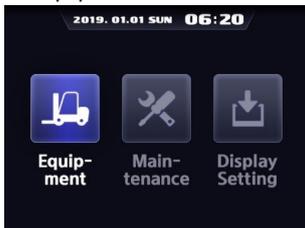
e. Weight display

Enable to adjust the digit-number of weight of main screen. Weight will be displayed as 1.5 tons if set as 100 kg unit. Weight will be displayed as 1.52 tons if set as 10 kg unit.



35D9VB3KY83

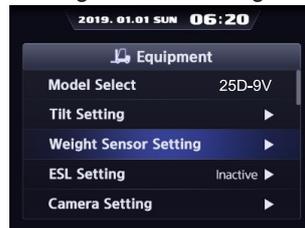
1. Equipment



35D9VB3KY47

Enter to equipment menu.

3. Weight sensor setting



35D9VB3KY64

Choose weight sensor setting and enter.

4. Weight display setting



35D9VB3KY80

Enter to weight display setting.

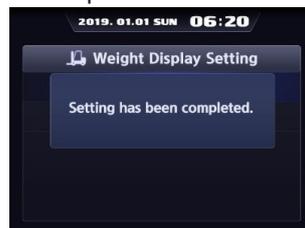
5. Unit



35D9VB3KY81

Choose unit what you want to use.

6. Completion



35D9VB3KY82

④ Startup control setting (standard) : Default is "Not use"

1. Equipment



Enter to equipment menu.

2. ELS setting



Choose ESL setting and enter.

3. Inactive



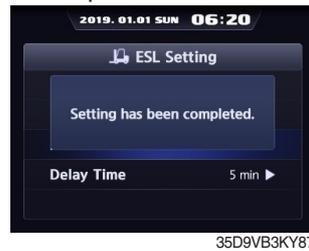
Choose inactive.

4. Change setting



If you want to change setting, press enter button.

5. Completion



3-1. Active



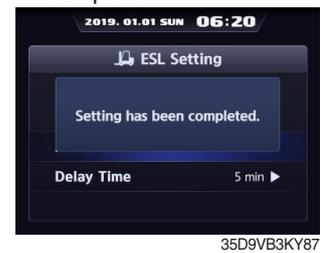
Choose active.

4. Change setting



If you want to change setting, press enter button.

5. Completion



Setting has been completed.

a. Check functions

- (a) Set the mode as active and start switch OFF.
- (b) Upon start switch ON, the password screen pops up and starting is prohibited until the right password has been offered. (But, driver still can start the vehicle if starts within 10 seconds from start switch OFF)
- (c) Set the mode as 5 min of delay time and start switch OFF.
- (d) check if vehicle can start within 5 min and start switch OFF.
- (e) check if vehicle requests password after 5 min.

※ Start switch ON screen (When startup control mode is ON)



Delay time

1. Equipment



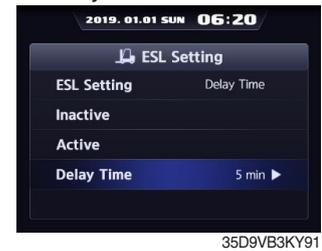
Enter to equipment menu.

2. ELS setting



Choose ESL setting and enter.

3. Delay time



Choose delay time.

4. Select value



Select value you want to apply.

5. Change setting



If you are sure to change ESL, press enter.

6. Completion



⑤ Camera setting

a. Device setup > Camera setup

b. After set the reverse gear interoperation as ON, the screen will be changed from main screen to camera mode if put gear into reverse, and if the gear is changed, screen will be back to the main screen.

1. Equipment



Enter to equipment menu.

2. Camera setting



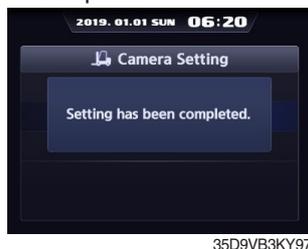
Choose camera setting and enter.

3. Reverse gear interworking



Choose ON or OFF.

4. Completion



⑥ Auto shift setting

- ※ In automatic mode, the gear is switched automatically by vehicle speed.
- ※ Enable to set the gear switching speed.
- ※ Applied 3.5 tons ~ 5.0 tons T/M 2nd gear.

1. Equipment



35D9VB3KY47

Enter to equipment menu.

2. Autoshift setting



35D9VB3KY99

Choose autoshift setting and enter.

3. Mode



35D9VB3KY100

Choose mode.

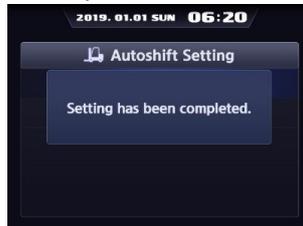
4. auto mode



35D9VB3KY101

Select mode. (auto/manual)

5. Completion



35D9VB3KY102

6. Speed set (auto)



35D9VB3KY103

When you change speed set, enter speed set.

7. Gear



35D9VB3KY104

Choose what you want to change.

8. Setting

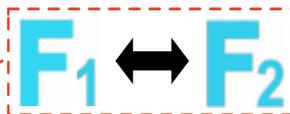


35D9VB3KY105

a. Check functions

(a) Select the "auto mode".

- During forward or reverse driving, a gear will be shifted automatically in accordance with gear speed.
- Not interworking with gear select switch (1st gear / 2nd gear) of gear selector.



35D9VB3KY106

(b) Select the "manual mode".

In accordance with gear select switch (1st gear / 2nd gear) of gear selector, T/M gear is shifted.

⑦ DCSR setting (Direction Change Shock Relief)

- Set the mode ON. Below is how this feature functions.
- If you are driving at over the block drive speed and then change gear from forward to reverse (or reverse to forward), the gear stays as neutral until the vehicle reaches the restore drive speed.
- The car changes direction and starts to travel.

※ Restore drive speed cannot be set over the block drive speed.

1. Equipment



35D9VB3KY47

Enter to equipment menu.

2. DCSR setting



35D9VB3KY107

Choose DCSR setting and enter.

3. Mode



35D9VB3KY108

Choose mode.

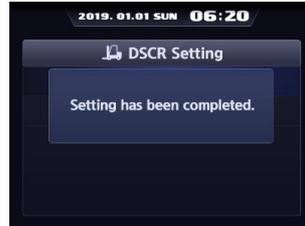
4. Setting



35D9VB3KY109

Select DCSR setting.

5. Completion



35D9VB3KY110

6. Speed set (auto)



35D9VB3KY111

If you want to change speed set, enter speed set (auto).

7. Drive speed



35D9VB3KY112

Change speed.

⑧ Vehicle max speed limit

1. Equipment



Enter to equipment menu.

2. Limit warning speed mode



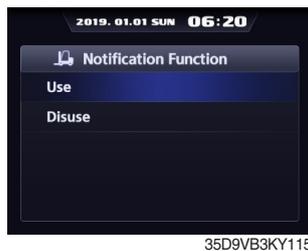
Choose warning speed mode and enter.

3. Notification function



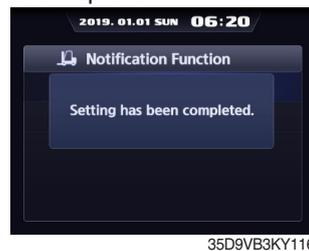
Enter to notification function.

4. Use



Select use.

5. Completion



6. Limit speed



Enter to limit speed menu.

7. Setting limit speed



Set limit speed.

Driving speed < 10 km/h



Driving speed ≥ 10 km/h



⑨ MCU/Cluster Information

1. Equipment



Enter to equipment menu.

2. Cluster-ci info



Choose cluster-ci info and enter.

3. Information



(2) Maintenance

① Engine failure history

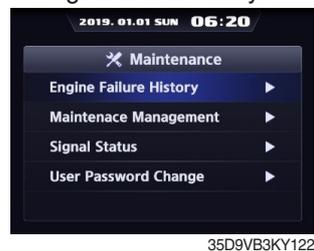
a. Check current engine failure

1. Maintenance



Enter to maintenance menu.

2. Engine failure history



Choose engine failure history and enter.

3. Failure history



Enter to current engine failure history.

4. Current engine failure



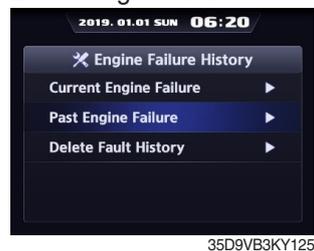
b. Check past failure history

1. Maintenance



Enter to maintenance menu.

2. Past engine failure



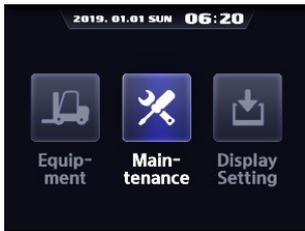
Enter to past engine failure history.

3. Check the failure



c. Delete failure history

1. Maintenance



35D9VB3KY48

Enter to maintenance menu.

2. Delete fault history



35D9VB3KY127

Choose delete fault history and enter.

3. Check



35D9VB3KY128

If you are sure to delete the failure history, then push enter button

4. Completion



35D9VB3KY129

② Consumables replacement management

- If the consumables replacement cycle has been passed, alarm will be displayed as ON.
- Press the "Consumables replacement" if replaced the consumables.
- Information about recent replacement (Max. 9) will be displayed.
- If you want to change the cycle, please press the "Change cycle" button.

1. Maintenance



35D9VB3KY48

Enter to maintenance menu.

2. Maintenance management



35D9VB3KY130

Choose maintenance management and enter.

3. Select replacement item.



35D9VB3KY131

Select the replace item.

4. Replacement



35D9VB3KY132

Select replacement using Up/Down button and press enter button.

5. Check.



35D9VB3KY133

If you are sure to replace supplies, press enter button.

6. Select the item.



35D9VB3KY134

Select the item you want to change maintenance interval.

4. Change



35D9VB3KY135

Select using Up/Down button and press enter button.

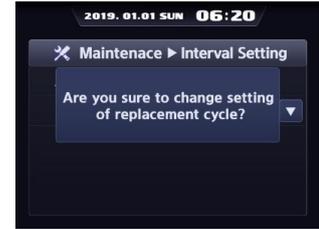
5. Setting



35D9VB3KY136

Set the item value using Up/Down button and press enter button

6. Completion



35D9VB3KY137

③ Signal status

1. Maintenance



35D9VB3KY48

Enter to maintenance menu.

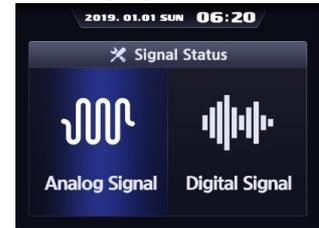
2. Signal status



35D9VB3KY138

Choose signal status and enter.

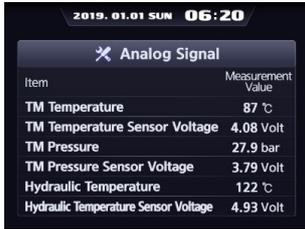
3. Analog signal



35D9VB3KY139

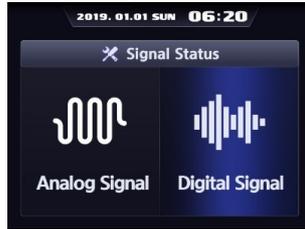
Enter to analog signal

4. Analog signal list



35D9VB3KY140

5. Digital signal



35D9VB3KY141

Enter to digital signal

6. Digital signal list



35D9VB3KY142

④ User password change

- This function is to allow to change password from default password to user defined password.
- Password length must be 5~10 digits.

※ Since, if you forget the password, you must request the A/S, do not forget the password.

1. Maintenance



35D9VB3KY48

Enter to maintenance menu.

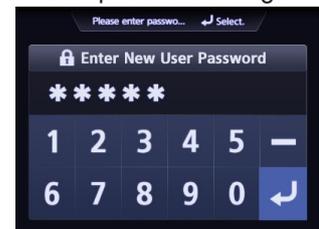
2. Password



35D9VB3KY143

Choose password change and enter.

3. User password change



35D9VB3KY144

Enter new user password.

(3) Display setting

① Adjust LCD brightness

- LCD brightness has two options. Automatic mode and manual mode.
- Manual mode always keeps the selected brightness.
- Daytime brightness : 100%, Nighttime brightness : 50%, Daytime/Nighttime time zone : 06~18

1. Display setting



Enter to display setting.

2. LCD adjustment



Choose LCD adjustment and enter.

3. LCD brightness



you can see this display when you choose display brightness is automatic.

4. LCD Brightness (Day/Night)



5. Brightness

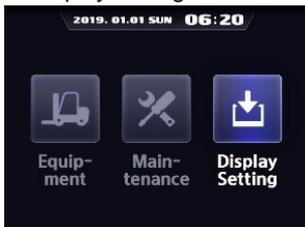


Brightness can be changed using Up/Down button when it is manual mode.

② Time setting

Set time in following order. (year > month > day > hour > minute)

1. Display setting



Enter to display setting.

2. Time setting



Choose time setting and enter.

3. Current time setting



Change time using Up/Down button and enter button.

③ Unit setting

1. Display setting



Enter to display setting.

2. Unit setting



Choose Unit setting and enter.

3. Setting list



Setting list

4. Unit



Select unit what you want to use.

④ Language setting

1. Display setting



Enter to display setting.

2. Language setting



Choose language setting and enter.

3. Select



Select language.

⑤ A/S phone No.

1. Display setting



Enter to display setting.

2. A/S phone No.



Choose A/S phone No. and enter.

3. Change A/S phone No.



Select phone No. if you want to change.

⑥ ESL password change

1. Display setting



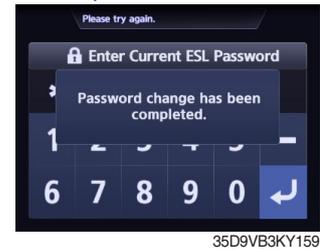
Enter to display setting.

2. ESL password change



Choose ESL password change and enter.

3. Completion



⑦ Maintenance management

1. Display setting



Enter to display setting.

2. Maintenance



Choose maintenance and enter.

3. Maintenance management

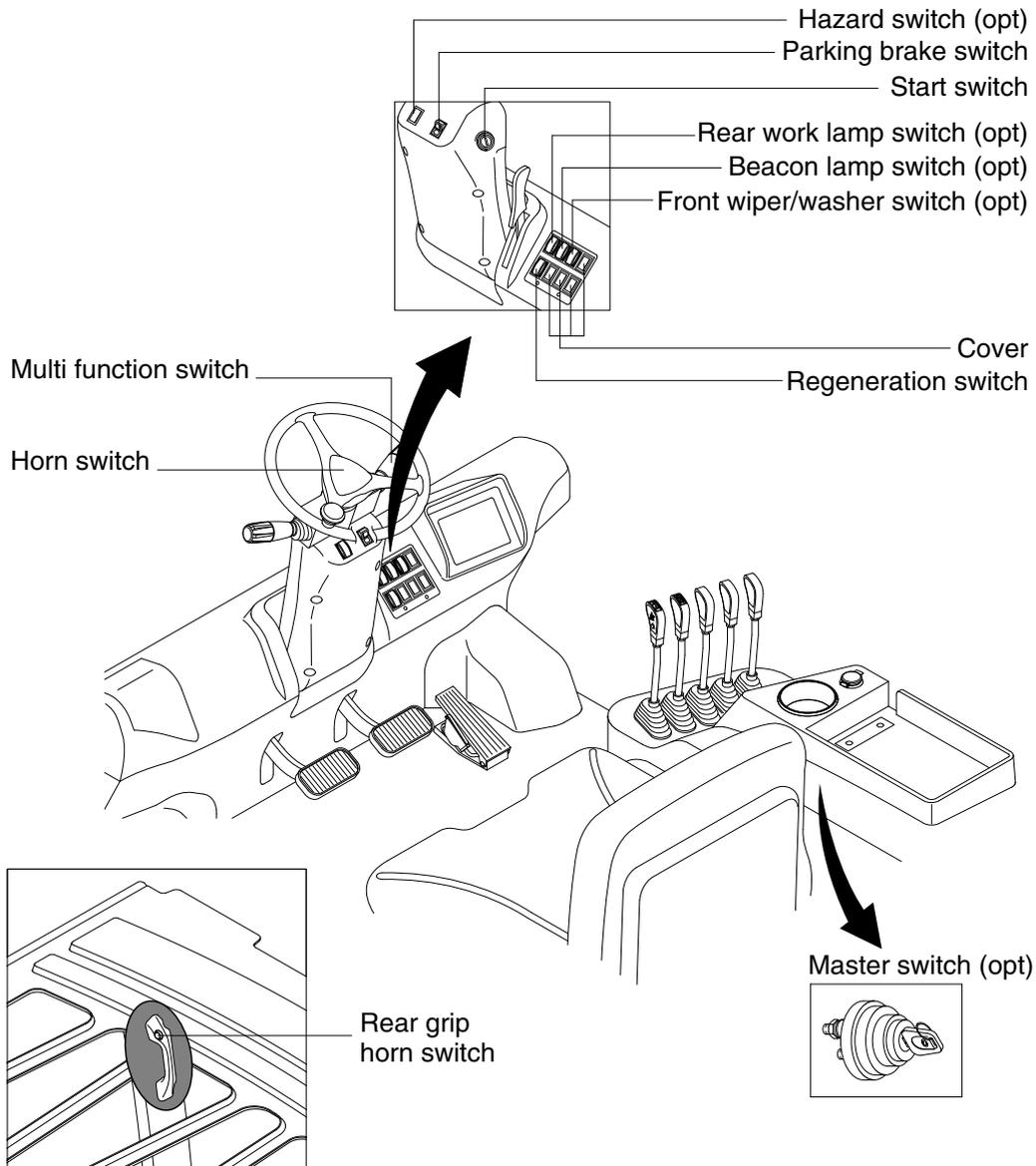


8) CAUSES AND CORRECTION OF CLUSTER WARNING LAMP

No.	Warning lamp types	Symbol	Warning and indicator lamp	Causes and correction
1	Engine oil pressure warning		Engine oil pressure warning lamp	Engine oil pressure is low. Please fill the engine oil
2	Engine warm-up indicator		Engine warm-up indicator lamp	Warm-up will be started.
3	Air cleaner warning		Air cleaner warning lamp	Replace the air cleaner filter.
4	Water in fuel warning		Water in fuel warning lamp	Please drain the water of the fuel filter.
5	Engine check warning		Engine check warning lamp	Check the failure code of cluster.
6	Engine stop warning		Engine stop warning lamp	Check the failure code of cluster.
7	DPF regeneration warning		DPF regeneration warning lamp	DPF regeneration is required.
8	DPF inhibit warning		DPF inhibit warning lamp	DPF regeneration is inhibited.
9	DPF High temp warning		DPF high temp warning lamp	High exhaust system temperature will be started.
10	Fuel warmer indicator		Fuel warmer indicator lamp	Warming up the fuel.
11	Transmission oil temperature warning		Transmission oil temperature warning lamp	T/M oil is over temperature condition. 110 °C (230 °F) or higher : Amber 120 °C (248 °F) or higher : Red
12	Parking brake indicator		Parking brake indicator lamp	Parking brake is the operational status.
13	Battery charging warning		Battery charging warning lamp	Battery is not being charged. Please check alternator and wiring.
14	Tilt lock indicator (if installed)		Tilt lock indicator lamp	Auto-leveling is the operational status.
15	OPSS indicator		OPSS indicator lamp	OPSS is working : Driving, lifting, and tilting is locked or the truck is parked status.
16	Fuel level warning		Fuel level warning lamp	Fuel level is low. Please fill the fuel.
17	Coolant temperature warning		Engine coolant temperature warning lamp	Engine coolant is over temperature condition.

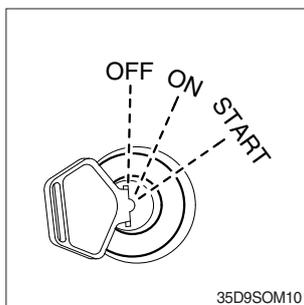
No.	Warning lamp types	Symbol	Warning and indicator lamp	Causes and correction
18	Clutch protection warning		Clutch protection warning lamp	Clutch protection warning operation
19	Consumables replacement indicator		Consumables replacement indicator lamp	Consumables replacement cycle has been passed.
20	LH Turn indicator		LH Turning indicator lamp	-
21	RH Turn indicator		RH Turning indicator lamp	-
22	Forward gear		Forward gear, 1 gear, and 2 gear indicator lamp	-
23	Reverse gear		Reverse gear, 1 gear, 2 and gear indicator lamp	-
24	Communication error warning (ECU)		Communication error warning lamp	Communication between cluster-CI and ECU has been failed. Check communication line.
25	Fingertip warning		Fingertip warning lamp	Check the fingertip.

5. SWITCHES



35D9VB3KY162

1) START SWITCH



(1) There are three positions, OFF, ON and START.

※ Before starting, set gear shift lever at NEUTRAL and pull parking brake lever to LOCK position.

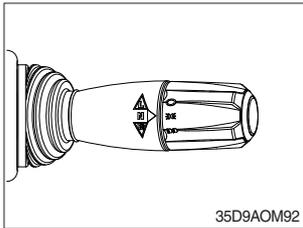
- OFF : None of electrical circuits activates.
- ON : All electrical systems are ON.
- START : Use when starting the engine.

Release key immediately after starting.

※ Key must be in the ON position with engine running to maintain electrical and hydraulic function and prevent serious truck damage.

2) MULTI FUNCTION SWITCH

(1) Clearance lamp switch

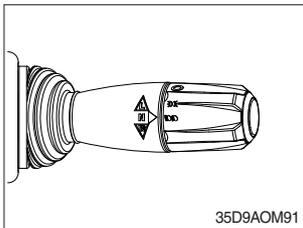


① Clearance lamp lights up
Twist the handle beneath steering wheel and make the notch align to ☉.

② Clearance lamp goes out
Twist the handle just opposite until the notch being aligned to ☉.

※ **When clearance lamp light up, then the clearance lamp and all panel lamps light up too.**

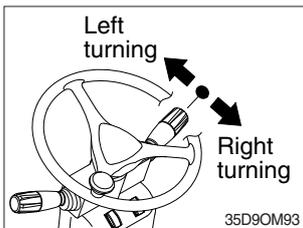
(2) Head lamp switch



① Head lamp lights up
Twist the handle beneath steering wheel and make the notch align to ☉.

② Head lamp goes out
Twist the handle just the opposite until the notch being aligned to ☉.

(3) Turning signal switch

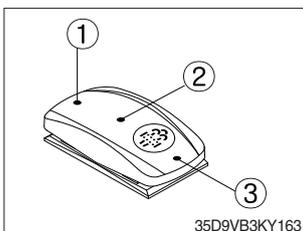


① This lever makes the turn signal lamp flash.

- Turning left : Push lever forward
- Turning right : Pull lever backward

※ **When the steering wheel is returned to straight, the turn signal is not cancelled. Return the lever to central position by hand.**

3) REGENERATION SWITCH



① Parked Regeneration Position

- (1) The regeneration applies if the truck is in a fireproof area and there is no plan to turn off.
- (2) Stop and park the machine.

▲ **The parking brake switch must be ON.**

(3) Put the gear in neutral position and wait until coolant temperature reaches 65°C. Push the regeneration switch ON button 3 seconds to initiate the parked regeneration of DPF. The engine speed may increase up to 2000 rpm and DPF regeneration begins and it will take approximately 20~40 minutes.

(4) The DPF regeneration and exhaust high temperature warning lamp will light ON during the regeneration function is operating.

(5) The DPF regeneration and(or) exhaust high temperature warning lamp will light OFF when the regeneration function is done.

② Auto Regeneration Position

(1) This position will initiate automatic DPF regeneration when needed.

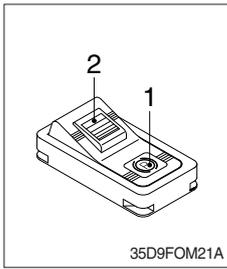
③ Inhibit Position

(1) This inhibit position disallows any automatic or manual DPF regeneration.

(2) This may be used by operator to prevent DPF regeneration when the machine is operating in a hazardous environment and is concerned about high temperature.

(3) It is strongly recommended that this position is only activated when high temperatures may causes a hazardous condition.

4) PARKING BRAKE SWITCH



(1) Position 1

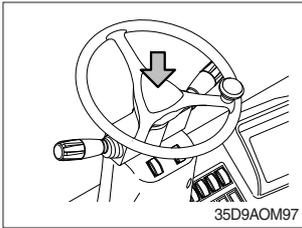
Parking brake is applied and front wheel is locked.

(2) Position 2

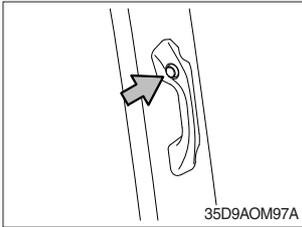
① Parking brake is released.

※ Before moving the truck be sure the parking brake is released.

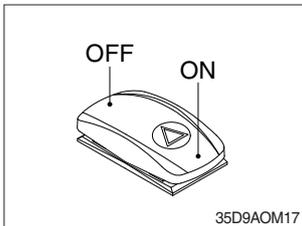
5) HORN SWITCH



(1) The horn sounds when the button is pressed.



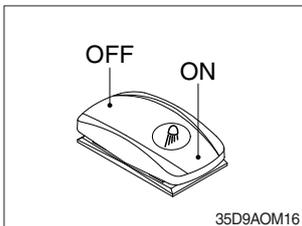
6) HAZARD SWITCH (option)



(1) Use when emergency situation or while loading operation.

※ If the switch is left on for a long time while the engine does not run, the battery would be dead(discharged).

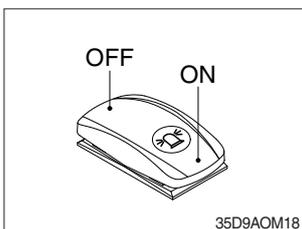
7) REAR WORK LAMP SWITCH (option)



(1) This switch is used to operate work lamps.

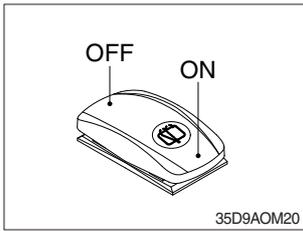
Press this switch to turn on work lamps.

8) BEACON LAMP SWITCH (option)



(1) This switch turn ON the rotary light.

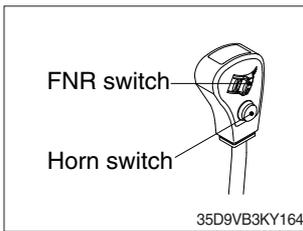
9) FRONT WIPER/WASHER SWITCH (option)



(1) This switch is used to operate the front wiper and washer by two steps.

- First step : The front wiper operates.
- Second step : The washer liquid is sprayed and the front wiper is operated only while pressing. If release the switch, return to the first step position.

10) FNR AND HORN SWITCH (option)



(1) FNR switch

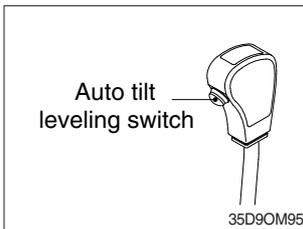
If you move the FNR switch forward, the truck moves forward, but if you move the FNR switch backward, the truck moves reverse.

※ **FNR switch has no speed select switch, thus use autoshift "ON" only.**

(2) Horn switch

The horn sounds when the button is pressed.

11) AUTO TILT LEVELING SWITCH (option)



(1) When the lever is operated on pressing this auto tilt leveling switch, the auto tilt leveling function is activated.

(2) Auto tilt leveling function

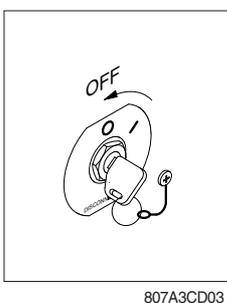
This function is mast tilt angle adjust to zero (0) degree (refer to the truck position).

※ **This function have to be used at the engine low idle rpm and stop position. If this function is activated at the high idle rpm or during starts, do not guarantee the mast stop at upright vertical position.**

※ **Operate the auto tilt function with unload conditions.**

▲ **When used in load condition, the load on the fork can fall down.**

12) MASTER SWITCH (option)



(1) This switch is used to shut off the entire electrical system.

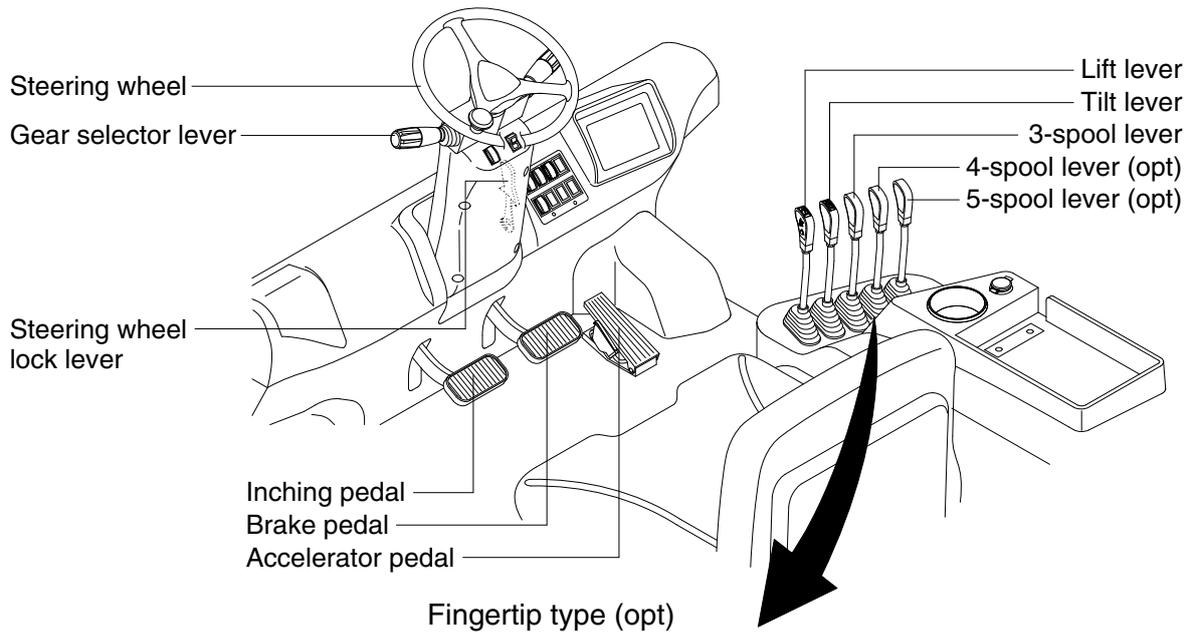
When the truck is not operated for a long time, turn OFF the master switch for the safety purpose.

(2) I : The battery remains connected to the electrical system.

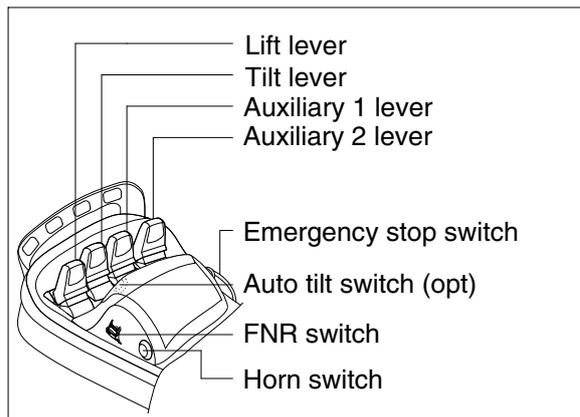
O : The battery is disconnected to the electrical system.

※ **Never turn the master switch to O (OFF) with the engine running. Engine and electrical system damage could result.**

6. CONTROL DEVICE

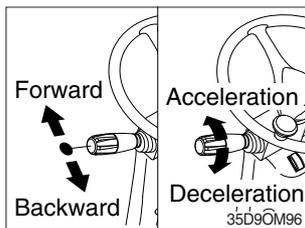


Fingertip type (opt)



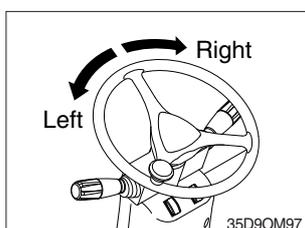
35D9VB3KY165A

1) GEAR SELECTOR LEVER



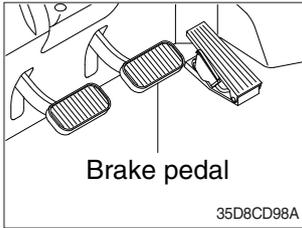
- (1) This lever is used for gear selection, forward 2 stages and reverse 2 stages.
- (2) If you push the gear selector lever, the truck moves forward, but pulling the gear selector lever, the truck moves backward.
- (3) If you turn the gear selector lever forward, the truck increases the speed, but if you turn the gear selector lever backward, the truck reduces the speed.

2) STEERING WHEEL



- (1) A steering cylinder in the center of the steering axle will operate the steering function.
- (2) Turning the steering wheel left, the truck moves to the left side and turning it right, the truck moves to the right side.

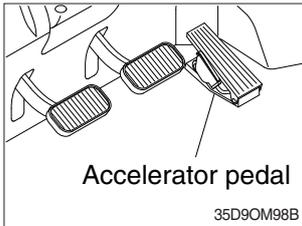
3) BRAKE PEDAL



(1) If the pedal is pushed, braking force is generated and bring the truck to a stop.

※ **Do not operate the truck with stepping on the brake pedal unnecessarily, or bring premature wear of brake disc.**

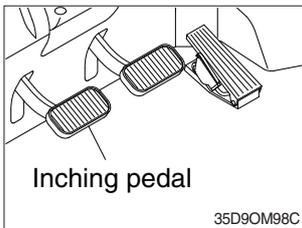
4) ACCELERATOR PEDAL



(1) This pedal controls the engine speed. The engine speed will increase in proportion to the degree of force applied to this pedal.

(2) Unless this pedal is pressed, the engine will run at low idling.

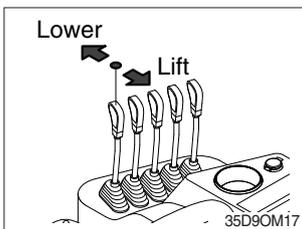
5) INCHING PEDAL



(1) The inching pedal is used for fine control of forward and reverse movement when lifting up or putting down loads.

※ **Do not put your foot on the inching pedal or brake pedal unless using it.**

6) LIFT LEVER



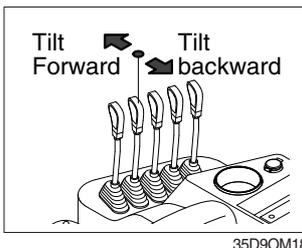
(1) Lift
PULL the lever BACK to LIFT the load.

(2) Lower
PUSH the lever FORWARD to LOWER the load.

(3) Holding
When the lever is released, the lifting or lowering action stops.

※ **Lifting speed is controlled by accelerator pedal.
Lowering speed is controlled by lever only.**

7) TILT LEVER



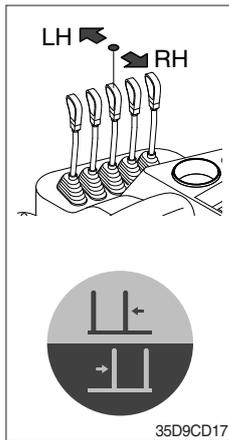
(1) Tilt forward
PUSH the lever FORWARD to tilt mast FORWARD.

(2) Tilt back
PULL the lever BACK to tilt mast BACKWARD.

(3) Holding
When the lever is released, tilting action stops.

※ **Forward and backward tilting speeds are controlled by tilt lever and accelerator pedal.**

8) LEVER FOR SIDE SHIFT



(1) LH movement

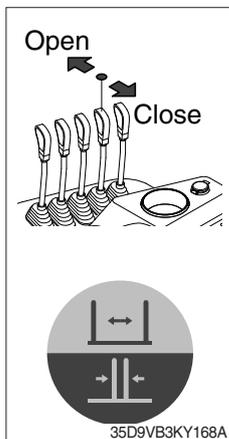
Push the lever forward to move the side shift to the left hand.

(2) RH movement

Pull the lever backward to move the side shift to the right hand.

9) LEVER FOR SIDE SHIFT WITH FORK POSITIONER

(1) Fork positioner (synchronizer type)



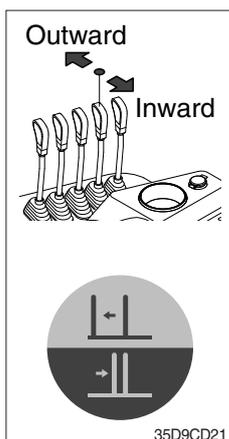
① Open the forks

Push the lever forward to open both forks simultaneously.

② Close up the forks

Pull the lever backward to close both forks simultaneously.

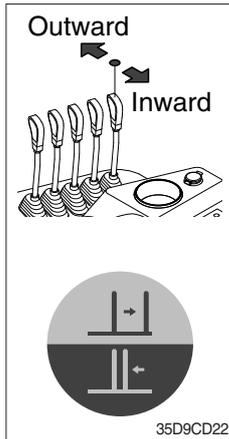
(2) Fork positioner (independent type)



① LH fork movement

- Push the lever forward to move the LH fork outward.

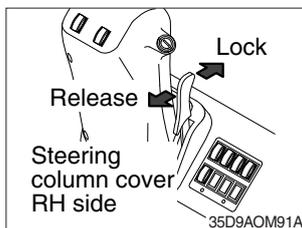
- Pull the lever backward to move the LH fork inward.



② RH fork movement

- Push the lever forward to move the RH fork outward.
- Pull the lever backward to move the RH fork inward.

10) STEERING COLUMN ADJUST LEVER



(1) The angle of the steering column can be adjusted forward and backward to 13 degree.

- ① Release : Pull the lever backward.
- ② Lock : Release the lever.

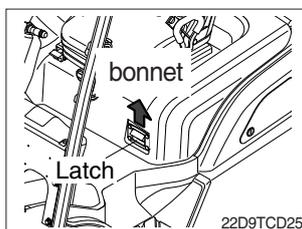
※ METHOD OF ADJUSTING STEERING COLUMN ANGLE

- (1) Pull the lock lever backward.
- (2) Move the steering column forward or backward to select the most suitable position.
- (3) Release the lever to lock the steering column in the desired position.

※ After adjusting, try to move the steering column backward and forward to check that it is locked in the selected position.

▲ Always carry out the adjustment with the machine stopped. Never try to adjust the steering column when the machine is moving.

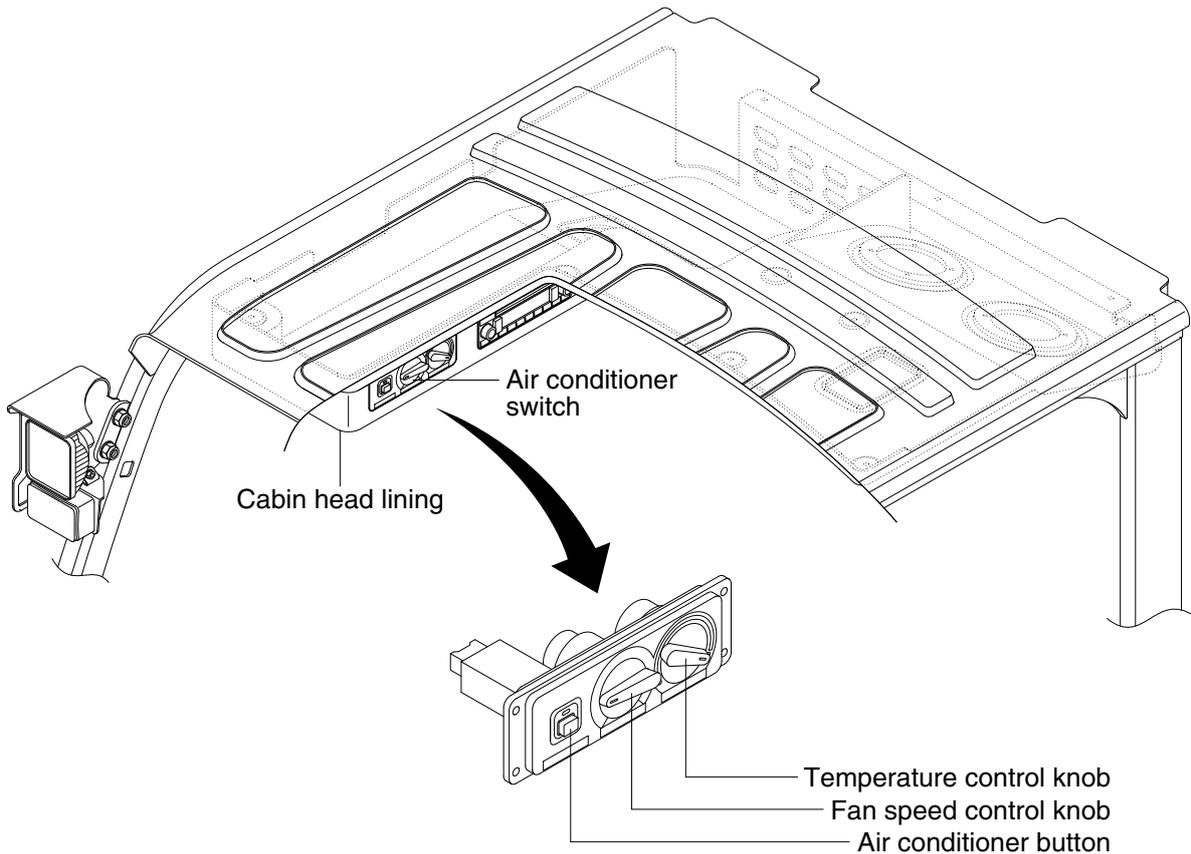
11) BONNET LATCH



- (1) Pull the latch and raise the bonnet to open it.
- (2) Inspection and maintenance can then be carried out easily.

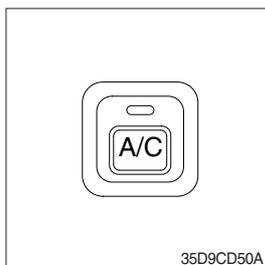
7. AIR CONDITIONER AND HEATER (OPTION)

Full auto air conditioner and heater are equipped for pleasant operation against outside temperature and defrost on window glass.



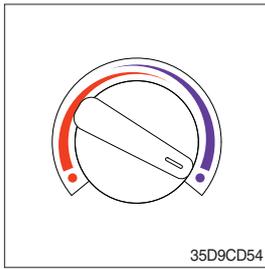
35D9CD90

1) AIR CONDITIONER BUTTON



- (1) When you push this button, air conditioner system is operated.
 (2) **Determines whether to perform a cooling function of air conditioner.**
- ① Indicator lamp ON : Air conditioner operation
 - ② Indicator lamp OFF : Fan only
- ※ **The indicator lamp ON when this button is pushed.**

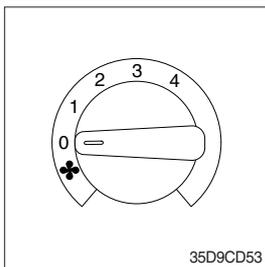
2) TEMPERATURE CONTROL KNOB



This knob regulates the temperature of air.

- ① Left side (red zone) : Heat up air temperature
- ② Right side (blue zone) : Cool down air temperature

3) FAN SPEED CONTROL KNOB

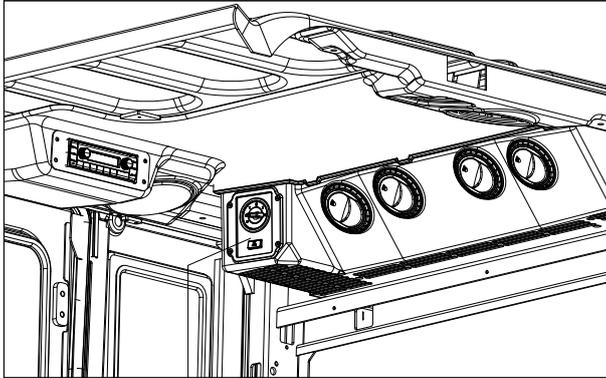


- ① It is possible to control the fan speed to four steps.

7. AIR CONDITIONER AND HEATER (OPTION)

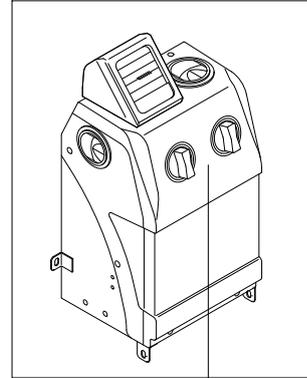
Full auto air conditioner and heater are equipped for pleasant operation against outside temperature and defrost on window glass.

Air conditioner



Air conditioner controller

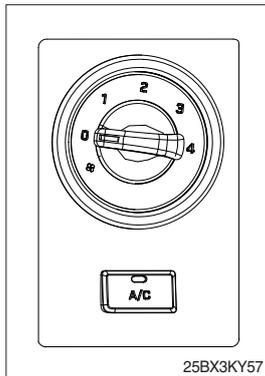
Heater



Heater controller

35D9VB3KY169

1) AIR CONDITIONER CONTROLLER



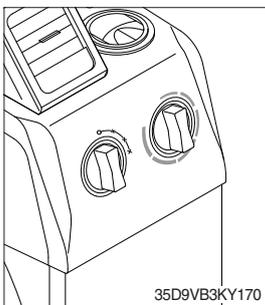
25BX3KY57

(1) The A/C button determines whether to perform a cooling function of the air conditioner. Push the button and the A/C lamp is ON or OFF.

- A/C lamp ON : Air conditioner operation
- A/C lamp OFF : Fan only

(2) The knob is possible to control fan speed to 4 steps.

2) HEATER CONTROLLER

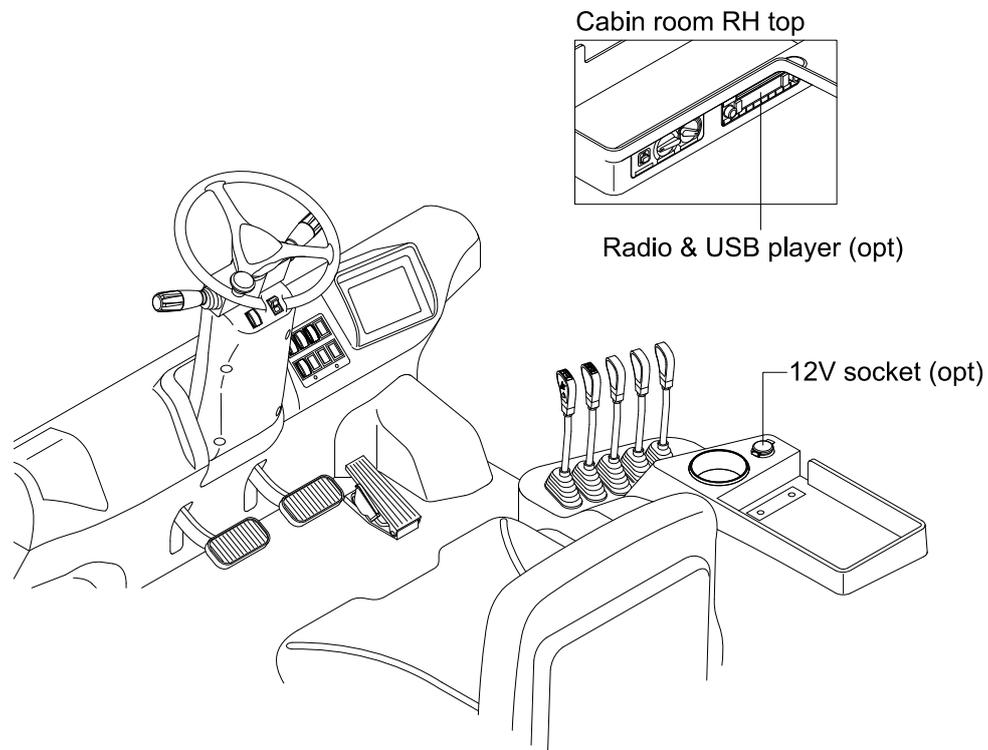


35D9VB3KY170

(1) The left knob turns the system ON/OFF and controls fan speed to 3 steps.

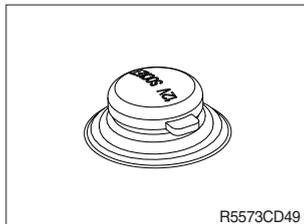
(2) The right knob controls the air temperature of the heater.

8. OTHERS



35D9VB3KY166

1) 12V SOCKET (option)



(1) Utilize the power of 12 V as your need and do not exceed power of 12 V, 120 W.

2) RADIO AND USB PLAYER (option)

■ BASIC FUNCTIONS



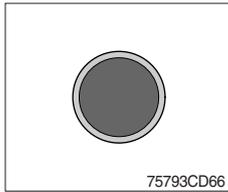
75793CD62-2

■ FRONT PANEL PRESENTATION

- | | | | | | |
|---|---|---|----|---|---|
| 1 |  | Audio selection button | 9 |  | Preset memory button 5 |
| |  | Audio selection knob | |  | Directory down |
| 2 |  | Power and volume button | 10 |  | Preset memory button 6 |
| 3 |  | Mode button
(select RADIO / USB / AUX) | |  | Directory up |
| 4 |  | UP / DOWN tuning button | 11 |  | Aux function |
| 5 |  | Preset memory button 1 | 12 |  | Preset scan (PS)
Best station memory (BSM) |
| |  | ID3 v2 display | 13 |  | Audio mute button |
| 6 |  | Preset memory button 2 | 14 |  | AM / FM button (radio) |
| |  | File scan | 15 |  | Send |
| 7 |  | Preset memory button 3 | 16 |  | End |
| |  | Repeat play selector | 17 |  | MIC (microphone) |
| 8 |  | Preset memory button 4 | 18 |  | Aux connector |
| |  | Random play selector | | | |

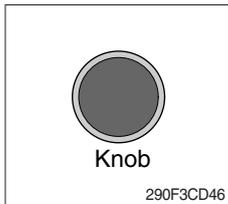
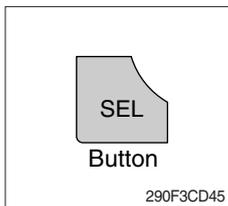
■ GENERAL

(1) Power and volume button



- ① Power ON/OFF button
Press power button to turn the unit ON or OFF shortly.
When the power is ON, the previous mode (last memory) will appear.
- ② Volume up / down control
Turn volume up / down button right to increase the volume level. The level will be shown in VOLUME xx on the LCD display. Turn it left to decrease the volume level. After 5 seconds of volume indication, display will return to the previous mode.

(2) Sound function selection button/knob (audio selection)



- ① This button is to adjust the sound. Each time you press SEL button shortly, LCD displays each mode as follows :
BASS → TREBLE → BAL → LOUD → EQ → BASS
- ※ When this button is pressed, LCD display shows selected function for 5 seconds and then returns back to the previous mode. On selected function, level can be controlled by turning this button. The display will automatically return to normal indication in 5 seconds after the last adjustment is made or when another function is activated.
- ② Bass control
To adjust the bass level, first select the bass mode by pressing the SEL button until BASS indication appears on the LCD display. Within 5 seconds of choosing the bass mode, turn selection knob right / left to adjust the bass level as desired.
The bass level will be shown on the LCD display from a minimum of BASS -10 to a maximum of BASS +10.
The display will automatically return to the normal indication in 5 seconds after the last adjustment or when another function is activated.
 - ③ Treble control
To adjust the treble level, first select the treble mode by pressing the SEL button until TREBLE indication appears on the LCD display. Within 5 seconds of choosing the treble mode, turn selection knob right / left to adjust the treble level as desired.
The treble level will be shown on the LCD display from a minimum of TREBLE -10 to a maximum of TREBLE +10.
The display will automatically return to the normal indication in 5 seconds after the last adjustment or when another function is activated.

④ Balance control

To adjust the left-right speaker balance, first select the balance mode by pressing the SEL button until the BAL indication appears on the LCD display.

Within 5 seconds of choosing the balance mode, turn selection knob right / left to adjust the balance as desired.

The balance position will be shown on the LCD display from BAL 10L (full left) to BAL 10R (full right).

When the volume level between the left and right speakers is equal, BAL L=R will be shown on the LCD display panel.

The display will automatically return to the normal indication in 5 seconds after the last adjustment or when another function is activated.

⑤ Loud control

When listening to music at low volume levels, this feature will boost the bass and treble response.

This action will compensate for the reduction in bass and treble performance experienced at low volume.

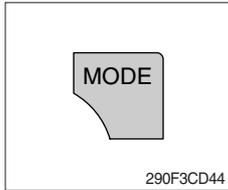
To select the loudness feature, press SEL button until LOUD ON or LOUD OFF is displayed, then turn selection knob left or right to activate or deactivate loudness.

⑥ Equalizer (EQ)

You can select an equalizer curve designed for 4 music types (POP, ROCK, CLASSIC, JAZZ).

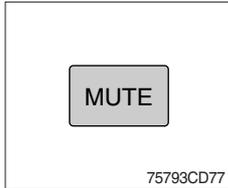
To select the desired curve, first select the EQ mode by pressing SEL button until the "EQ OFF" indication appears on the display panel. Within 5 seconds of choosing the EQ mode, turn selection knob to select an equalizer curve as desired.

(3) Mode button



- ① Press mode button to select RADIO / USB / AUX / BT audio.

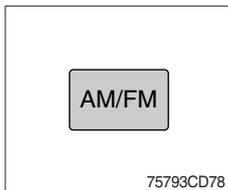
(4) Audio mute button



- ① Press mute button momentarily to mute volume and MUTE mark will blink on the LCD display. Press the button again to return to the mode in use before the mute mode was activated.

■ RADIO

(1) AM / FM / LW band selector

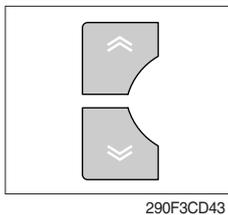


- ① Each time this button is pressed, the radio band is changed. Each time this button is pressed, LCD displays each band as follows :

FM1 → FM2 → FM3 → AM → LW → FM1

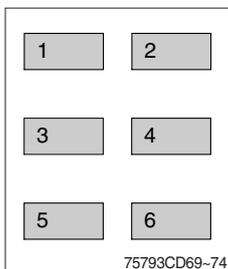
※ LW band is only available for Europe.

(2) Up / down tuning



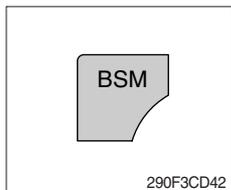
- ① To automatically select a radio station, momentarily press the up tune seek button  or down tune seek button  for less than 3 seconds to search for the closest radio station. To manually select a radio station, press the up tuning & down tuning button for longer than 3 seconds. The radio frequency will move up or down step by step each time you press button.

(3) Station pre-set button



- ① Pressing these buttons shortly will recall your favorite pre-set radio stations. To store your favorite stations into any of the 6 pre-set memories in each band (AM/FM/LW), use the following procedure :
 - a. Turn the radio ON and select the desired band.
 - b. Select the first station to be pre-set using the manual up/down or automatic seek tuning control button.
 - c. Press the chosen pre-set button to store your selected station into and continue to hold it in. The beep sound will be momentarily heard and the pre-set number will appear on the LCD display indicating that the station is now set into that pre-set memory position and can be recalled at any time, by pressing that pre-set button.

(4) Pre-set scan (PS) / Best station memory (BSM) button



① Pre-set scan (PS)

Press BSM button shortly to scan the 6 pre-set station stored the memories on each band (AM/FM/LW).

The unit will stop at each pre-set station (the pre-set number on the LCD display will flash during pre-set scan operation) and remain on the selected frequency. Press the button momentarily again to remain on the station currently being heard.

② Best station memory (BSM)

Pressing BSM button for longer than 2 seconds will activate the BSM tuning feature which will automatically scan and enter each station into memory.

If you have already set the pre-set memories to your favorite stations, activating the BSM tuning feature will erase those stations and enter the new ones.

This BSM feature is most useful when traveling in a new area where you are not familiar with the local stations.

■ USB PLAYER



75793CD81-1

(1) USB function

① Connect a USB device if you want to listen to MP3 file in a USB device.

② It will automatically play MP3 file in the USB device and the LCD display will show "READING USB".

※ If there are no files on USB device, playback will revert back to the previous mode after displaying "NO FILE".

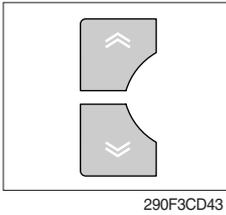
(2) AUX function

① If you want to listen to music of a external audio device, connect a external audio device through AUX cable.

② Change AUX mode by pressing MODE button.

If audio file of Audio device is playing, you can listen to music through speaker.

(3) File selection & cue / review button



① File selection function

This button is used to select file up / down.

Each time the forward file select \blacktriangleright is pressed, file number is increased.

Each time the backward file select \blacktriangleleft is pressed, file number is decreased.

② Cue / review functions

High-speed audible search of file on a USB can be made by this button (the cue and review functions).

Press and hold the cue button \blacktriangleright to advance rapidly in the forward direction or the review button \blacktriangleleft to advance rapidly in the backward direction.

(4) MP3 directory / file searching

① The D-, D+ button is used to select a particular directory and file.

Press and hold for more than 3 seconds while playing MP3 file.

Turn right / left the selection knob to search the directory. Press the button when you find the wanted directory.

For example, the directory search generally changes in two methods depending on the order of writing as follows.

· Method 1 : ROOT → Dir01 → Dir02 → Dir03 → Dir04 → Dir05 → Dir06 → Dir07 → ROOT

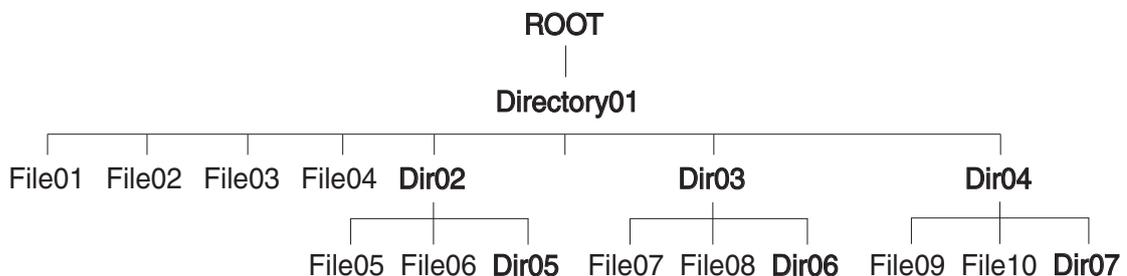
· Method 2 : ROOT → Dir01 → Dir02 → Dir05 → Dir03 → Dir06 → Dir04 → Dir07 → ROOT

If you want to search the file in the located directory, turn right / left the selection knob consecutively. Press the button when you find the wanted file. The unit will then play the selected file.

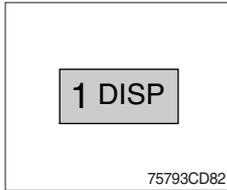
For instance, the file search changes in Dir01 as follows.

File01 → File02 → File03 → File04 → File01

※ MP3 directory / file configuration



(5) ID3 v2 display



- ① Disp button is used to change the display information. While playing an MP3 file, you can change the file information shown on the LCD display. Each time you press DISP (display), the display changes to show the following.
- ※ **If the MP3 disc does not have any ID3 information, the display will show NO ID3 on LCD display.**

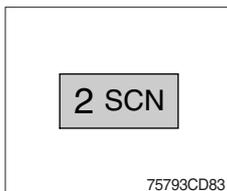
Directory name / file name (normal mode)

↓
Album name / performer / title

↓
File number / elapsed time

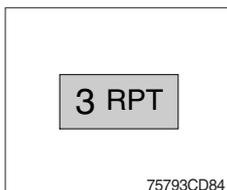
↓
Directory name / file name (normal mode)

(6) File scan (SCN)



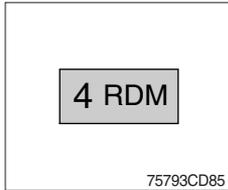
- ① During USB play, press SCN button to play the first 10 seconds of each file on the whole file on the USB (SCN mark will appear on the LCD display). When a desired file is reached, press the SCN button again to cancel the function. The unit will then play the selected file.
- ※ In case of playing MP3 file, when the SCN (scan) button is pressed and held for longer than 2 seconds, the SCN mark will blink on the LCD display and all files in the selected directory will be introduced until the file scan mode is cancelled by pressing the SCN button again or by activating the random or repeat functions.

(7) Repeat play selector (RPT)



- ① During USB play, press RPT button to play the selected file repeatedly (RPT will appear on the LCD display). Play of the file will continue to repeat until this button is pressed again and the RPT disappears from the LCD display.
- ※ **In case of playing MP3 file, when the RPT button is pressed and held longer than 2 seconds, the RPT mark will blink on the LCD display and play all files in the selected directory and will be repeated until the directory repeat mode is cancelled by pressing the repeat button again or by activating the scan or random functions (RPT mark will disappear from LCD display).**

(8) Random play selector (RDM)

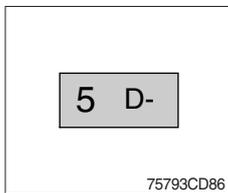


- ① During USB play, press RDM button to play the files on the USB in a random shuffled order (RDM will appear on the LCD display). The file select function will also select file in the random order instead of the normal process.

The random play mode can be cancelled by this button again.

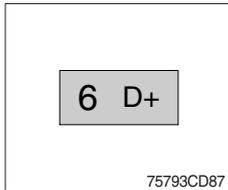
- ※ In case of MP3 file, when the random button is pressed and held longer than 2 seconds, the RDM mark will blink on the LCD display and play all files in directory randomly until the directory random mode is cancelled by pressing the random button again or by activating the scan or repeat functions (RDM mark will disappear from LCD display).

(9) Directory down



- ① Press D- button briefly while playing MP3. The previous directory is located each time you press this button.

(10) Directory up



- ① Press D+ button briefly while playing MP3 . The next directory is located each time you press this button.
- ※ If the MP3 file does not have a directory, the unit play MP3 at 10-file intervals.
- ※ If any MP3 file does not exist in USB, this button can not operate.

■BLUETOOTH

(1) Introduce

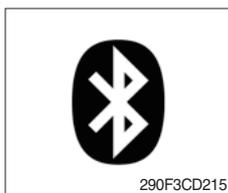
The bluetooth radio supports bluetooth wireless technology. Bluetooth technology provides a wireless link between a bluetooth mobile phone or bluetooth music player and the hyundai bluetooth radio.

The bluetooth radio features a hands-free system so that you may talk on the telephone without taking your eyes off the road or your hands off the wheel. A microphone built into the front of the radio receives your voice and the calling party can be heard through the speakers.

Additionally, a bluetooth music player can be wirelessly connected to be the bluetooth radio and playback music tracks in high quality sound through the speakers. Many bluetooth mobile phones include a music player and can provide both hands-free calling and music playback.

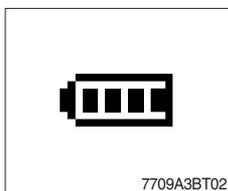
Check your mobile phone owner's manual for details.

- ※ When the starting switch is in the ON position, the bluetooth radio is on standby to connect with your mobile phone even if the radio is switched off. The truck battery may therefore become drained if the ignition switch remains in the ON position for an extended period of time.
- ※ Bluetooth technology uses low power radio transmission to connect to your bluetooth mobile phone or bluetooth music player. As radio signal strength reduces over distance, the quality of sound performance during phone calls and music playback may become poor if the distance between the radio and device widens. It is recommended that the mobile phone or music player is kept inside the cab for best results.
- ※ As a bluetooth wireless connection can extend to 10 meters, your bluetooth device may automatically connect to the bluetooth radio even if the device is not in the truck.
- ※ The bluetooth radio uses the latest digital noise & echo suppression system to provide the best sound clarity with little or no distortion, but in some conditions there may be some echo and noise experienced. It is recommended to keep the car windows closed during hands-free calls for best results.



① Bluetooth indicator

The bluetooth logo is displayed when a bluetooth device is connected, and not displayed, when no bluetooth device is connected. If the bluetooth mobile phone is connected but the connection is not of satisfactory quality, the bluetooth logo is not displayed.



② Battery strength indicator

This is an indication of your mobile phone battery condition. If your mobile phone is unable to transmit battery condition level, the indicator is not displayed.



③ Single level indicator

This is an indication of the mobile phone network signal strength in your current location. If your mobile phone is not able to transmit signal level, the indicator is not displayed.

(2) Bluetooth function

① Pairing a bluetooth mobile phone or music player

A bluetooth connection must first be established between your bluetooth mobile phone or bluetooth music player and the bluetooth radio. The first step to connecting the bluetooth radio and bluetooth device is to introduce or "Pair" the bluetooth radio and bluetooth device together.

It is recommended that you have the instruction manual for your bluetooth mobile phone or music player with you during the pairing process described below to understand how to set your device to pair with the bluetooth radio.

- ※ It is recommended that all other bluetooth devices other than mobile phones are switched off during the registration or pairing process.

a. Connection method

- a) Press SEND button for 2 seconds in any mode, **PAIRING** appears on the bluetooth radio display.
- b) Browse your mobile phone or music player menu to find the **SETTINGS** or **CONNECTIVITY** section to find the bluetooth connection section.
- c) Find the command that may be called search for bluetooth device or discovery mode so that your bluetooth device can locate all the bluetooth devices within range that may be connected.
- d) After the search is complete, **HFI AUDIO** should appear on your mobile phone or music player screen.
- e) Select **CONNECT** or **SELECT** on your mobile phone or music player.
- f) The mobile phone or music player should now prompt you to enter a PIN code. Enter 0000 into your bluetooth device and select OK.
- g) The mobile phone or music player should confirm that it has established a new paired connection with the bluetooth radio.
- h) The connecting process is now complete.
- i) If the connecting process is successful, the bluetooth logo appears on the radio display and paired phone name (e.g. Samsung or LG) and **CONNECTED** appear on the display for 2 seconds.
- j) Your bluetooth device is now ready for use with the bluetooth radio.
- k) If the pairing failed, **FAIL** appears on the bluetooth radio display.

- ※ (a) **The bluetooth radio allows a maximum of 6 bluetooth devices to be paired.**

- (b) **Bluetooth technology only allows one phone to be connected to your bluetooth radio at one time.**
- (c) **If a bluetooth music player is to be connected together with a mobile phone, refer to the page 3-55, PLAYING MUSIC USING BLUETOOTH AUDIO.**
- (d) **Bluetooth connection with a mobile phone is normally established using the Hands-Free Profile (HFP). However, in some cases, the connection may use Head Set Profile (HSP) and some functions may not be available.**
- (e) **As each mobile phone or music player brand and model has a different menu structure and control names, you may need to refer to the user manual of your bluetooth device for the correct procedure to connect to another bluetooth device.**
- (f) **Once the bluetooth pairing is complete, automatic connection between mobile phone and the bluetooth radio is possible whenever the starting switch is switched ON.**
The mobile phone must be set to automatically connect to the bluetooth radio to allow this automatic connection.

- (g) The bluetooth radio will give connection priority to the last connected mobile phone.
- (h) It is recommended that all other bluetooth devices other than mobile phones are switched off during the registration or pairing process.

② **Disconnecting a bluetooth device**

If you need to disconnect your bluetooth mobile phone or music player with the bluetooth radio, follow the steps below.

- a. Press END button for 2 seconds in any mode.
- b. When the bluetooth connection is lost, bluetooth logo disappears and the previously connected device name (e.g. Samsung or LG) and **DISCONNECTED** appear on the display.

③ **Select a bluetooth device**

The bluetooth radio can pair up to 6 bluetooth devices. A previously paired mobile phone or music player can be selected for connection using the method described below. Refer to the table 2-1 for examples.

Preset No.	Bluetooth device name (for example)
1	Samsung
2	LG
3	Apple
4	Motorola
5	EMPTY
6	EMPTY

Table 2-1

- a. Press SEND button, to select **BLUETOOTH** mode.
- b. Press SEL button. **SELECT PHONE** will appear on the display.
- c. Turn selection knob, until **SELECT PHONE** is displayed.
- d. When **SELECT PHONE** appears on the display, press SEL button.
- e. Press the preset button to display the name of the bluetooth device name of the mobile phones or music players previously paired. You may also turn selection knob to display the paired devices.

· Each time you turn or selection knob, the LCD displays as follows :

SAMSUNG → LG → APPLE → MOTOROLA → BACK → SAMSUNG

- f. If the bluetooth mobile phone name is Samsung as in the example of table 2-1, then **Samsung** appears on the display. When preset button  is pressed or selection knob is turned 1 click to the right.
- g. Once the name of the bluetooth device you wish to connect is displayed, in this example **Samsung**, press SEL button to have the Samsung device connected.
- h. If the connection is successful, the bluetooth logo appears on the display and paired phone name **Samsung** and **CONNECTED** appears on the display for 2 seconds.

④ Deleting a previously paired bluetooth device

If you no longer need to use a paired bluetooth device with the bluetooth radio, it can be deleted. It is from the registration assignment for another mobile phone. Refer to the example of paired devices shown table 2-1.

- a. Press SEND button, to select **BLUETOOTH** mode.
- b. Press SEL button and **SELECT PHONE** appears on the display.
- c. Turn selection knob, until **DELETE PHONE** is displayed.
- d. When **DELETE PHONE** appears on the display, press SEL button.
- e. Press the preset button to display the name of the bluetooth device name of the mobile phones or music players previously paired. You may also turn selection knob to display the paired devices.
- f. Once the name of the bluetooth device you wish to delete is displayed, in this example **Samsung**, press SEL button to have the Samsung device deleted.
- g. The display will then show **DELETE NO** or if selection knob is turned, **DELETE OK** on the display.
- h. To confirm your wish to delete the selected device, when **DELETE OK** appears on the display press SEL button.
- i. If the bluetooth device being deleted (in this example) was connected, the display will show previous paired phone name "Samsung" and DISCONNECTED.
- j. In the example above, the number of paired devices is now reduced to 3, leaving 3 vacant memory locations for additional devices. Table 2-2 shows the example.

Preset No.	Bluetooth device name (for example)
1	LG
2	Apple
3	Motorola
4	EMPTY
5	EMPTY
6	EMPTY

Table 2-2

⑤ Basic telephone operation

a. Using the bluetooth radio for hands-free calls

- a) When an **INCOMING** call arrives at the bluetooth radio via your connected bluetooth mobile phone, **INCOMING CALL** appears on the display for 3 seconds then the calling telephone number is shown.
 - b) Press SEND button to answer the **INCOMING** call. **HANDSFREE** appears on the display.
 - c) To end the call, press END button and the call will end and **END CALL** is displayed.
 - d) If you wish to reject an **INCOMING** call, press END button.
 - e) To make an **OUTGOING** call use the keypad of the connected bluetooth mobile phone to enter a number and press the **OFF-HOOK (SEND)** button on your mobile phone.
 - f) **OUTGOING CALL** is displayed on the bluetooth radio and the call continues in hands-free mode.
 - g) The call can be ended by pressing END button the **ON-HOOK (END)** button of the connected mobile phone.
- ※ Some mobile phones may not reject an **INCOMING** call using the action of d) above. In this case, press the **ON-HOOK** button on the connected mobile phone to reject.

b. Last call number redials

Select **BLUETOOTH** mode by pressing SEND button. To making a call to the last dialed number, press SEND button again. **OUTGOING CALL** appears on the radio display for 1 second.

- ※ Some mobile phones may require an additional press of SEND button to start the last number redial call.

c. Switching to private (headset) mode during a call

During an INCOMING or OUTGOING call started in hands-free mode, it is possible to switch to the private call mode using the mobile phone handset to speak and to hear the calling party in private.

- a) Press SEND button during the conversation ; **PRIVATE** appears on the display.
- b) To switch back to hands-free mode using the bluetooth radio, press SEND button again during the private conversation ; **HANDSFREE** is shown on the display and hands-free call operation continues.

- ※ The above switching function may cause disconnection of the bluetooth link between the bluetooth radio and some mobile phones.

If SEND button is pressed during the private conversation, the bluetooth connection will return automatically.

(3) Function of bluetooth audio player

① Playing music using bluetooth audio

The bluetooth radio supports the bluetooth profile Audio Advanced Distribution Profile (A2DP). If your mobile phone or music player supports this profile then it is possible to listen to music tracks located on your bluetooth device through the bluetooth radio and speakers.

Additionally, the bluetooth radio supports the Audio Video Remote Control Profile (AVRCP).

If your bluetooth mobile phone or music player supports this profile then it is possible to advance to the next track or replay previous tracks on using the buttons on the front of the bluetooth radio your truck.

- a. Press MODE button until **BT AUDIO** is displayed.
- b. When **BT AUDIO** appears on the display, select the music player feature on your bluetooth device. And then bluetooth device play automatically to begin playback.
- c. To pauses the bluetooth audio playback, press SEL button for 2 seconds. Press the knob again for 2 seconds to resume playback.
- d. Press buttons (⏮, ⏭) advance to the next or previous music track.

- ※ (a) Check your bluetooth device owner's manual for details of how to play music tracks via an external bluetooth audio system such as the bluetooth radio.

(b) Some bluetooth mobile phones cannot play music at all or may play music tracks in low-quality audio through the bluetooth radio.

(c) Some mobile phones require additional pairing to allow bluetooth audio playback.

(d) Information about songs (ID3) (e.g. the elapsed playing time, song titles, song index, etc.) playing using bluetooth audio profile cannot be displayed on this bluetooth radio.

② Connecting a bluetooth music player and mobile phone simultaneously

It is possible to connect a bluetooth mobile phone and a separate bluetooth music player to the bluetooth radio at the same time. Phone calls can be sent and received using the hands-free feature while music is playing using the bluetooth audio feature.

(4) Bluetooth setting

① Setting the automatic call answer feature

If this function is selected, the bluetooth radio automatically answers all INCOMING calls.

This feature enhances safety as the driver does not need to take their hands from the steering wheel to accept an INCOMING call.

Note that this feature cannot be set at different settings for each of the paired mobile phones.

- a. Press SEND button to select BLUETOOTH mode.
- b. Turn selection knob until **SETTINGS** is displayed.
- c. Press SEL button until **AUTO ANSWERING** is displayed.
- d. Press SEL button and turn selection knob. The LCD then displays as follows :

ANSWER OFF → ANSWER 5 SEC → ANSWER 10 SEC → RETURN → ANSWER OFF

- ANSWER OFF = Automatic answer function is not active.
- ANSWER 5 SEC = Automatic answers all INCOMING calls after a 5 second delay.
- ANSWER 10 SEC = Automatic answers all INCOMING calls after a 10 second delay.
- RETURN = Return to previous menu.

- e. After making your selection, press SEL button to store the selection.
- f. **SETTINGS** is then displayed for adjustment if required.
- g. If you do not wish to adjust any further bluetooth settings, press END button to return to the last selected mode.

② Setting calling voice volume

This function is to set the level of the mobile phone's calling voice volume to be heard through the bluetooth radio and speakers.

- a. Follow steps a. to c. of above setting below ①.
- b. When **VOICE VOLUME** appears on the display, press SEL button to display the current level of the calling voice. Turn selection knob right or left to adjust the calling voice volume as desired. This is the level the calling voice volume will be set to each time the bluetooth radio is used after the stating switch is turned off and then on again.
- c. After making your selection, press SEL button to store the selection.
- d. **SETTINGS** is then displayed for adjustment if required.
- e. If you do not wish to adjust any further bluetooth settings, press END button to return to the last selected mode.

③ Setting the ring volume

This function is to set the level of the mobile phones ring tone volume to be heard through the bluetooth radio and speakers.

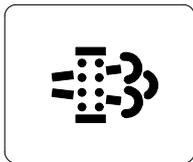
- a. After making your selection, press SEL button to store the selection.
- b. When **RING VOLUME** appears on the display, press the SEL button to display the current level of the ring tone. Turn selection knob right or left to adjust the ring tone volume as desired. This is the level the ringer volume will be set to each time the bluetooth radio is used after the starting switch is turned off and then on again.
- c. After making your selection, press SEL button to store the selection.
- d. The press END button to return to the last selected mode.

9. REGENERATION SYSTEM

Particulate matter (mainly soot) filtered in DPF (diesel particulate filter) occurs poor performance caused by increasing exhaust gas pressure, incinerating process to convert from accumulated soot to ash is required. When emissions are accumulated in the DPF, regenerative operation is carried out on a regular basis. This process named regeneration. The type of regeneration composes of automatic regeneration (active, auto-play by exhaust gas heat) and parked regeneration (passive play by the artificial aid).

- ※ The hydraulic operation noise will be generated during automatic regeneration. During auto regeneration, it is possible to operate the truck (driving and handling the load), and hydraulic operation sound may change depending on the user operation.
- ※ Sufficient automatic regeneration could reduce the frequency of parked regeneration.
- ▲ Regeneration generates hot exhaust and causes hot exhaust system components.
- ▲ Exhaust system components get very hot and can cause severe burns. Risk for fire.
- ▲ Do not touch the surface of the DPF muffler during or up to 30 minutes after operation.
- ▲ Do not perform regeneration in a flammable environment.

(1) DPF (diesel particulate filter) regeneration lamp

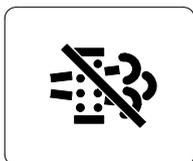


2609A3CD19

This warning lamp will light ON or blink during the regeneration function is operating.

- ※ Refer to the page 3-10 for details.
- ※ The machine must be in a fireproof area during the entire regeneration process.

(2) DPF regeneration inhibit warning lamp

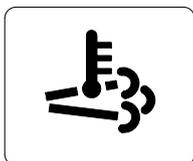


2609A3CD20

This warning lamp will light ON when the DPF switch is OFF position.

- ※ Refer to the page 3-10 for details.

(3) Exhaust high temperature warning lamp

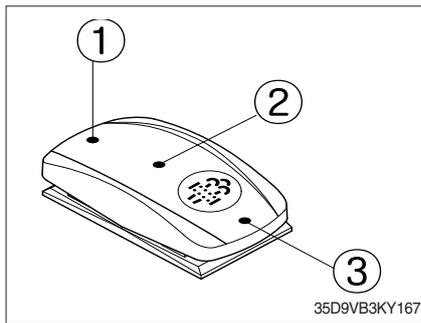


2609A3CD21

This warning lamp will light ON when the exhaust temperatures are high due to regeneration of the DPF.

- ※ Refer to the page 3-10 for details.

(4) Regeneration switch



This switch is used to select the regeneration function of the DPF.

※ Refer to the page 3-37 for details.

※ Recommend the regeneration inhibit function (③ position) as below situations.

- High-temperature exhaust is generated during regeneration, so switch should be pressed in areas where fire is dangerous.
- Low-speed/low-load operation and short-term operation will reduce regeneration performance. In this case, use the inhibitor switch. When the DPF forced regeneration warning lamp blinks or turns on, it is recommended to regenerate when stop.

① Parked Regen. Position

② Auto Regen. Position

③ Inhibit Position

(5) DPF cleaning

Every 3000 hours.

※ Refer to the page 7-26 for details.